MMG NEOSID

FERRITE AND IRON POWDER CORES

NEOSID (CANADA) LIMITED
10 VANSCO ROAD
TORONTO, ONTARIO M8Z 5J4
PHONE (416) 251-2831 FAX (416) 251-6790
TOLL FREE 1-800-387-7384
US 1-800-387-7213

"A MEMBER OF THE MAGNETIC MATERIALS GROUP"

NEOSID (CANADA) LIMITED
10 VANSCO ROAD, TORONTO,ONTARIO
TEL. (416) 251-2831 FAX (416)251-6790

CONTENTS

Introduction

Magnetic Materials Group plc, is an international organisation supplying magnetic components worldwide for all areas of electronics and electrical engineering. formed in 1982, the company is quoted on the USM of the London Stock Exchange.

Main group products are soft ferrites, powdered iron cores, and inductive components manufactured by its principal operating divisions-Neosid, Neosid Canada, and Krystinel-in the UK and North America.

All of these companies have a long history as pioneer producers of soft ferrites, and Neosid has been manufacturing iron powder cores since the mid-1930. With its distribution activities the Group embraces all classes of magnetic materials, including permanent magnetics.

This catalogue represents a collection of sizes and shapes that Neosid can presently manufacture in its Canadian manufacturing facility.

We are continually upgrading our processes, materials, and tooling to provide our customers with a better product. We invite your inquiry on any of our standard ferrite or powdered iron products. We also welcome all inquiries for any custom part that you may need.

This catalogue lists standard sizes and types which are normally carried in stock, or may be produced in a reasonable lead time.

General Application Data for Toroids, Beads and Baluns.

The toroidal form for any magnetic core is the simplest and most efficient configuration. It is also the only shape that does not emit any electro-magnetic leakage interference. A toroid is the only core whose effective permeability is the true permeability of the material from which the core is made.

Toroids come in a wide range of sizes and materials. The smallest resemble beads in size and shape, and are usually called that. They are often not used as true toroids but rather as cores for suppression purposes, usually threaded over a single wire. This makes the name "BEADS" all the more appropriate.

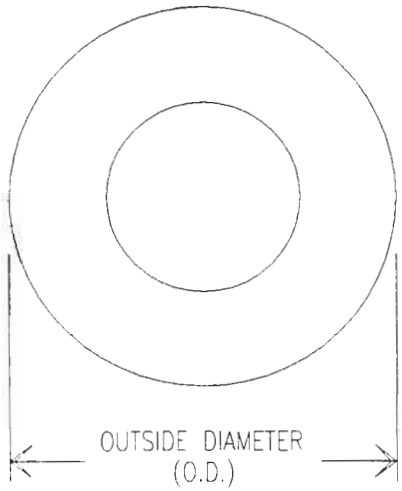
The other type of core configuration that appears in this catalogue is the multi-aperture core or more commonly called the BALUN core. These are frequently used in similar applications to beads and toroids. However they also have applications unique to themselves.

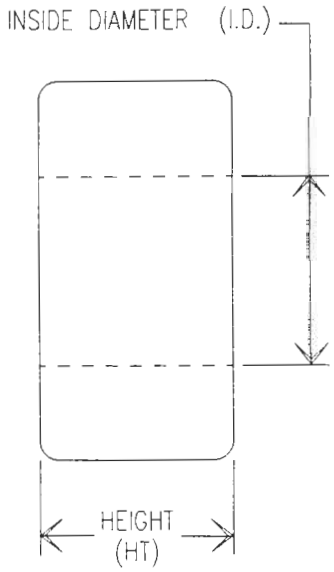
This catalogue covers cores that are made out of nickel-zinc ferrite with permeabilities up to 1000, and iron powder cores with permeabilities up to 75.

Powdered Iron Toroids have many applications including EMI/RFI interference suppression; energy storage chokes, dimmer and other similar circuits, and many varieties of inductors and transformers.

416-251-2831

MMG/NEOSID (CANADA) LIMITED
FERRRITE BEADS AND SLEEVES





The use of electronic circuits for data communications, computation, power transformation, and other purposes has made it necessary for diverse circuits to work in close proximity. Often parasitic oscillations interfere with adjoining circuits or other nearby equipment.

Beads made from ferrite are the most economical and versitile EMI/RFI attenuators. Generally a bead or sleeve tnreaded on a wire or lead, acts as a lossy suppressor at very high frequencies.

At these high frequencies the bead provides a series impedance that converts the high frequency signals into heat through magnetic losses. These losses have little or no effect on the lower frequencies at which the circuit is operating.

EMI/RFI suppression may be the most popular use for Neosid's beads, however these parts are still used in various RF circuits. If our F16 ferrite is not suitable for a particular RF application, please contact the factory, as all of Neosid's sizes can be manufactured in our F25 and F29 materials. Call for availability.

MMG/NEOSID (CANADA) LIMITED FERRITE BEADS AND SLEEVES

PART NUMBER	O.D. inches	I.D. inches	HT inches	MAT'L	AL VALUE nH
30T0075035	.075	.035	.055	F13	132
31T0075035	.075	.035	.055	F14	45
32T0075035	.075	.035	.055	F16	25
38T0075035	.075	.035	.055	F19	203
24T0075035	.075	.035	.055	F302	66
30T0075028	.075	.028	.125	F13	376
31T0075028	.075	.028	.125	F14	128
32T0075028	.075	.028	.125	F16	72
38T0075028	.075	.028	.125	F19	578
24T0075028	.075	.028	.125	F302	188
30T0105040	.105	.040	.140	F13	414
31T0105040	.105	.040	.140	F14	141
32T0105040	.105	.040	.140	F16	80
38T0105040	.105	.040	.140	F19	638
24T0105040	.105	.040	.140	F302	207
30T0140050	.140	.050	.130	F13	407
31T0140050	.140	.050	.130	F14	137
32T0140050	.140	.050	.130	F16	78
38T0140050	.140	.050	.130	F19	626
24T0140050	.140	.050	.130	F302	203
30T0140060	.140	.060	.130	F13	343
31T0140060	.140	.060	.130	F14	116
32T0140060	.140	.060	.130	F16	66
38T0140060	.140	.060	.130	F19	528
24T0140060	.140	.060	.130	F302	172
30T0140185	.140	.060	.185	F13	489
31T0140185	.140	.060	.185	F14	165
32T0140185	.140	.060	.185	F16	94
38T0140185	.140	.060	.185	F19	752
24T0140185	.140	.060	.185	F302	244
30T0150125	.150	.040	.125	F13	478
31T0150125	.150	.040	.125	F14	162
32T0150125	.150	.040	.125	F16	92
38T0150125	.150	.040	.125	F19	735
24T0150125	.150	.040	.125	F302	239
30T0150335	.150	.040	.335	F13	1281
31T0150335	.150	.040	.335	F14	434
32T0150335	.150	.040	.335	F16	246
38T0150335	.150	.040	.335	F19	1970
24T0150335	.150	.040	.335	F302	640

416-251-2831

MMG/NEOSID (CANADA) LIMITED FERRITE BEADS AND SLEEVES

PART NUMBER	.OD inches	.I.D inches	HT. inches	MAT'L	AL VALUE nH
30T0160050	.160	.050	.185	F13	640
31T0160050	.160	.050	.185	F14	216
32T0160050	.160	.050	.185	F16	123
38T0160050	.160	.050	.185	F19	985
24T0160050	.160	.050	.185	F302	320
30T0160060	.160	.060	.125	F13	375
31T0160060	.160	.060	.125	F14	127
32T0160060	.160	.060	.125	F16	72
38T0160060	.160	.060	.125	F19	576
24T0160060	.160	.060	.125	F302	188
30T0160080	.160	.080	.125	F13	275
31T0160080	.160	.080	.125	F14	93
32T0160080	.160	.080	.125	F16	53
38T0160080	.160	.080	.125	F19	423
24T0160080	.160	.080	.125	F302	138
30T0187150	.187	.080	.150	F13	397
31T0187150	.187	.080	.150	F14	134
32T0187150	.187	.080	.150	F16	76
38T0187150	.187	.080	.150	F19	611
24T0187150	.187	.080	.150	F302	198
30T0187005	.187	.080	.500	F13	1323
31T0187005	.187	.080	.500	F14	448
32T0187005	.187	.080	.500	F16	255
38T0187005	.187	.080	.500	F19	2035
24T0187005	.187	.080	.500	F302	622
30T0187007	.187	.080	.750	F13	1985
31T0187007	.187	.080	.750	F14	671
32T0187007	.187	.080	.750	F16	382
38T0187007	.187	.080	.750	F19	3054
24T0187007	.187	.080	.750	F302	992
30T0187085	.187	.080	.850	F13	2250
31T0187085	.187	.080	.850	F14	761
32T0187085	.187	.080	.850	F16	433
38T0187085	.187	.080	.850	F19	3461
24T0187085	.187	.080	.850	F302	1125
30T0187002	.187	.080	1.00	F13	2646
31T0187002	.187	.080	1.00	F14	896
32T0187002	.187	.080	1.00	F16	509
38T0187002	.187	.080	1.00	F19	4070
24T0187002	.187	.080	1.00	F302	1323

MMG/NEOSID (CANADA) LIMITED FERRITE BEADS AND SLEEVES

PART NUMBER	.OD inches	.I.D inches	HT. inches	MAT'L	AL VALUE nH
30T0200250	.200	.062	.250	F13	869
31T0200250	.200	.062	.250	F14	294
32T0200250	.200	.062	.250	F16	167
38T0200250	.200	.062	.250	F19	1338
24T0200250	.200	.062	.250	F302	435
30T0200312	.200	.062	.312	F13	1085
31T0200312	.200	.062	.312	F14	367
32T0200312	.200	.062	.312	F16	209
38T0200312	.200	.062	.312	F19	1669
24T0200312	.200	.062	.312	F302	543
30T0200440	.200	.062	.440	F13	1529
31T0200440	.200	.062	.440	F14	518
32T0200440	.200	.062	.440	F16	294
38T0200440	.200	.062	.440	F19	2353
24T0200440	.200	.062	.440	F302	765
30T0205080	.205	.095	.150	F13	363
31T0205080	.205	.095	.150	F14	123
32T0205080	.205	.095	.150	F16	70
38T0205080	.205	.095	.150	F19	560
24T0205080	.205	.095	.150	F302	180
30T0235250	.240	.125	.250	F13	520
31T0235250	.240	.125	.250	F14	176
32T0235250	.240	.125	.250	F16	100
38T0235250	.240	.125	.250	F19	800
24T0235250	.240	.125	.250	F302	260
30T0235500	.240	.125	.500	F13	1040
31T0235500	.240	.125	.500	F14	352
32T0235500	.240	.125	.500	F16	200
38T0235500	.240	.125	.500	F19	1600
24T0235500	.240	.125	.500	F302	520
30U0312312	.312	.100	.312	F13	1060
31U0312312	.312	.100	.312	F14	359
32U0312312	.312	.100	.312	F16	204
38U0312312	.312	.100	.312	F19	1632
24U0312312	.312	.100	.312	F302	530
30U0560500	.560	.250	.500	F13	1264
31U0560500	.560	.250	.500	F14	428
32U0560500	.560	.250	.500	F16	243
38U0560500	.560	.250	.500	F19	1945
24U0560500	.560	.250	.500	F302	632

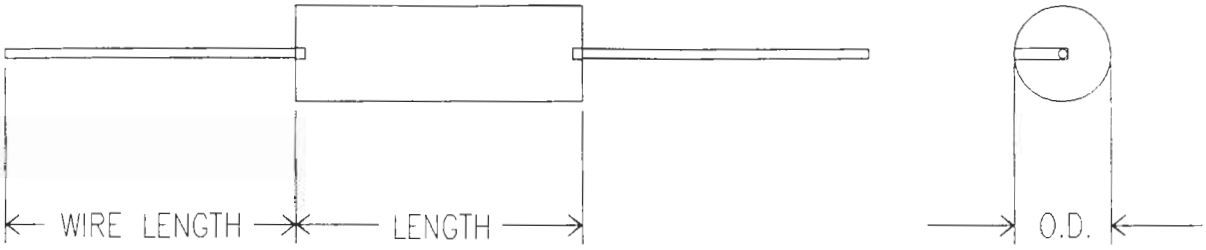
416-251-2831

MMG/NEOSID (CANADA) LIMITED FERRITE BEADS AND SLEEVES

PART NUMBER	O.D. inches	I.D. inches	HT. inches	MAT'L	AL VALUE nH
30U0560011	.560	.250	1.125	F13	2843
31U0560011	.560	.250	1.125	F14	963
32U0560011	.560	.250	1.125	F16	547
38U0560011	.560	.250	1.125	F19	4374
24U0560011	.560	.250	1.125	F302	1422
30U0560501	.560	.312	.500	F13	939
31U0560501	.560	.312	.500	F14	318
32U0560501	.560	.312	.500	F16	180
38U0560501	.560	.312	.500	F19	1445
24U0560501	.560	.312	.500	F302	470
30U0560751	.560	.312	.750	F13	1408
31U0560751	.560	.312	.750	F14	477
32U0560751	.560	.312	.750	F16	271
38U0560751	.560	.312	.750	F19	2167
24U0560751	.560	.312	.750	F302	705
30U0560111	.560	.312	1.125	F13	2113
31U0560111	.560	.312	1.125	F14	715
32U0560111	.560	.312	1.125	F16	406
38U0560111	.560	.312	1.125	F19	3251
24U0560111	.560	.312	1.125	F302	1056
30V0740001	.745	.205	1.00	F13	3754
31V0740001	.745	.205	1.00	F14	1271
32V0740001	.745	.205	1.00	F16	722
38V0740001	.745	.205	1.00	F19	5775
24V0740001	.745	.205	1.00	F302	1877
30V0740015	.745	.205	1.50	F13	5630
31V0740015	.745	.205	1.50	F14	1900
32V0740015	.745	.205	1.50	F16	1080
38V0740015	.745	.205	1.50	F19	8660
24V0740015	.745	.205	1.50	F302	2815
30V0740002	.745	.205	2.00	F13	7500
31V0740002	.745	.205	2.00	F14	2540
32V0740002	.745	.205	2.00	F16	1440
38V0740002	.745	.205	2.00	F19	11550
24V0740002	.745	.205	2.00	F302	3750

MMG/NEOSID (CANADA) LIMITED
COIL FORMS AND ROD CORES

COILFORMS



ROD CORES

Neosid presently manufactures a diverse range of coilforms and rod cores. If there is a particular application that requires a size or material that is not listed, please do not hesitate to contact the factory with your specific requirements.

416-251-2831

MMG/NEOSID (CANADA) LIMITED FERRITE RODS

PART NUMBER	DESCRIPTION		O. D. inches	LENGTH inches
30P0187005	187P5	F13	0.187	0.500
31P0187005	187P5	F14	0.187	0.500
32P0187005	187P5	F16	0.187	0.500
34P0187005	187P5	F25	0.187	0.500 *
35P0187005	187P5	F29	0.187	0.500 *
24P0187005	187P5	F302	0.187	0.500
30P0187007	187P7	F13	0.187	0.750
31P0187007	187P7	F14	0.187	0.750
32P0187007	187P7	F16	0.187	0.750
34P0187007	187P7	F25	0.187	0.750 *
35P0187007	187P7	F29	0.187	0.750 *
24P0187007	187P7	F302	0.187	0.750
30P0187010	187P1	F13	0.187	1.000
31P0187010	187P1	F14	0.187	1.000
32P0187010	187P1	F16	0.187	1.000
34P0187010	187P1	F25	0.187	1.000 *
35P0187010	187P1	F29	0.187	1.000 *
24P0187010	187P1	F302	0.187	1.000
30P0250007	250P7	F13	0.250	0.750
31P0250007	250P7	F14	0.250	0.750
32P0250007	250P7	F16	0.250	0.750
34P0250007	250P7	F25	0.250	0.750 *
35P0250007	250P7	F29	0.250	0.750 *
24P0250007	250P7	F302	0.250	0.750
30P0250010	250P1	F13	0.250	1.000
31P0250010	250P1	F14	0.250	1.000
32P0250010	250P1	F16	0.250	1.000
34P0250010	250P1	F25	0.250	1.000 *
35P0250010	250P1	F29	0.250	1.000 *
24P0250010	250P1	F302	0.250	1.000
30P0250011	250P1.125	F13	0.250	1.125
31P0250011	250P1.125	F14	0.250	1.125
32P0250011	250P1.125	F16	0.250	1.125
34P0250011	250P1.125	F25	0.250	1.125 *
35P0250011	250P1.125	F29	0.250	1.125 *
24P0250011	250P1.125	F302	0.250	1.125
30P0250012	250P1.250	F13	0.250	1.250
31P0250012	250P1.250	F14	0.250	1.250
32P0250012	250P1.250	F16	0.250	1.250
34P0250012	250P1.250	F25	0.250	1.250 *
35P0250012	250P1.250	F29	0.250	1.250 *
24P0250012	250P1.250	F302	0.250	1.250

*THESE PARTS MUST BE GROUND TO SIZE, TO REDUCE COST PLEASE CONTACT THE FACTORY FOR AS PRESSED SIZES

MMG/NEOSID (CANADA) LIMITED FERRITE RODS

PART NUMBER	DESCRIPTION		O. D. inches	LENGTH inches
30P0250015	250P1.5	F13	0.250	1.500
31P0250015	250P1.5	F14	0.250	1.500
32P0250015	250P1.5	F16	0.250	1.500
34P0250015	250P1.5	F25	0.250	1.500 *
35P0250015	250P1.5	F29	0.250	1.500 *
24P0250015	250P1.5	F302	0.250	1.500
30P0312010	312P1	F13	0.312	1.000
31P0312010	312P1	F14	0.312	1.000
32P0312010	312P1	F16	0.312	1.000
34P0312010	312P1	F25	0.312	1.000 *
35P0312010	312P1	F29	0.312	1.000 *
24P0312010	312P1	F302	0.312	1.000
30P0312012	312P1.25	F13	0.312	1.250
31P0312012	312P1.25	F14	0.312	1.250
32P0312012	312P1.25	F16	0.312	1.250
34P0312012	312P1.25	F25	0.312	1.250 *
35P0312012	312P1.25	F29	0.312	1.250 *
24P0312012	312P1.25	F302	0.312	1.250
30P0312015	312P1.5	F13	0.312	1.500
31P0312015	312P1.5	F14	0.312	1.500
32P0312015	312P1.5	F16	0.312	1.500
34P0312015	312P1.5	F25	0.312	1.500 *
35P0312015	312P1.5	F29	0.312	1.500 *
24P0312015	312P1.5	F302	0.312	1.500
30P0375010	375P1	F13	0.375	1.000
31P0375010	375P1	F14	0.375	1.000
32P0375010	375P1	F16	0.375	1.000
34P0375010	375P1	F25	0.375	1.000 *
35P0375010	375P1	F29	0.375	1.000 *
24P0375010	375P1	F302	0.375	1.000
30P0375012	375P1.25	F13	0.375	1.250
31P0375012	375P1.25	F14	0.375	1.250
32P0375012	375P1.25	F16	0.375	1.250
34P0375012	375P1.25	F25	0.375	1.250 *
35P0375012	375P1.25	F29	0.375	1.250 *
24P0375012	375P1.25	F302	0.375	1.250
30P0375015	375P1.5	F13	0.375	1.500
31P0375015	375P1.5	F14	0.375	1.500
32P0375015	375P1.5	F16	0.375	1.500
34P0375015	375P1.5	F25	0.375	1.500 *
35P0375015	375P1.5	F29	0.375	1.500 *
24P0375015	375P1.5	F302	0.375	1.500

*THESE PARTS MUST BE GROUND TO SIZE, TO REDUCE COST PLEASE CONTACT THE FACTORY FOR AS PRESSED SIZES

416-251-2831

MMG/NEOSID (CANADA) LIMITED FERRITE RODS

PART NUMBER	DESCRIPTION		O. D. inches	LENGTH inches
30P0437010	437P1	F13	0.437	1.000
31P0437010	437P1	F14	0.437	1.000
32P0437010	437P1	F16	0.437	1.000
34P0437010	437P1	F25	0.437	1.000 *
35P0437010	437P1	F29	0.437	1.000 *
24P0437010	437P1	F302	0.437	1.000
30P0437012	437P1.25	F13	0.437	1.250
31P0437012	437P1.25	F14	0.437	1.250
32P0437012	437P1.25	F16	0.437	1.250
34P0437012	437P1.25	F25	0.437	1.250 *
35P0437012	437P1.25	F29	0.437	1.250 *
24P0437012	437P1.25	F302	0.437	1.250
30P0500008	500P8	F13	0.500	0.875
31P0500008	500P8	F14	0.500	0.875
32P0500008	500P8	F16	0.500	0.875
34P0500008	500P8	F25	0.500	0.875 *
35P0500008	500P8	F29	0.500	0.875 *
24P0500008	500P8	F302	0.500	0.875
30P0500001	500P1	F13	0.500	1.000
31P0500001	500P1	F14	0.500	1.000
32P0500001	500P1	F16	0.500	1.000
34P0500001	500P1	F25	0.500	1.000 *
35P0500001	500P1	F29	0.500	1.000 *
24P0500001	500P1	F302	0.500	1.000
30P0500012	500P1.25	F13	0.500	1.250
31P0500012	500P1.25	F14	0.500	1.250
32P0500012	500P1.25	F16	0.500	1.250
34P0500012	500P1.25	F25	0.500	1.250 *
35P0500012	500P1.25	F29	0.500	1.250 *
24P0500012	500P1.25	F302	0.500	1.250
30P0500015	500P1.5	F13	0.500	1.500
31P0500015	500P1.5	F14	0.500	1.500
32P0500015	500P1.5	F16	0.500	1.500
34P0500015	500P1.5	F25	0.500	1.500 *
35P0500015	500P1.5	F29	0.500	1.500 *
24P0500015	500P1.5	F302	0.500	1.500
30P0500002	500P2	F13	0.500	2.000
31P0500002	500P2	F14	0.500	2.000
32P0500002	500P2	F16	0.500	2.000
34P0500002	500P2	F25	0.500	2.000 *
35P0500002	500P2	F29	0.500	2.000 *
24P0500002	500P2	F302	0.500	2.000

*THESE PARTS MUST BE GROUND TO SIZE, TO REDUCE COST PLEASE CONTACT THE FACTORY FOR AS PRESSED SIZES

MMG/NEOSID (CANADA) LIMITED FERRITE COIL FORMS

PART NUNBER	MAT'L	O.D. inches	LENGTH inches	WIRE LENGTH inches	AWG
24CF185005	F302	0.187	0.500	1.500	20
31CF185005	F14	0.187	0.500	1.500	20
32CF185005	F16	0.187	0.500	1.500	20
38CF185005	F19	0.187	0.500	1.500	20
24CF185007	F302	0.187	0.750	1.500	20
31CF185007	F14	0.187	0.750	1.500	20
32CF185007	F16	0.187	0.750	1.500	20
38CF185007	F19	0.187	0.750	1.500	20
24CF200005	F302	0.200	0.500	1.500	20
31CF200005	F14	0.200	0.500	1.500	20
32CF200005	F16	0.200	0.500	1.500	20
38CF200005	F19	0.200	0.500	1.500	20
24CF200007	F302	0.200	0.750	1.500	20
31CF200007	F14	0.200	0.750	1.500	20
32CF200007	F16	0.200	0.750	1.500	20
38CF200007	F19	0.200	0.750	1.500	20
24CF200008	F302	0.200	0.875	1.500	20
31CF200008	F14	0.200	0.875	1.500	20
32CF200008	F16	0.200	0.875	1.500	20
38CF200008	F19	0.200	0.875	1.500	20
24CF200010	F302	0.200	1.000	1.500	20
31CF200010	F14	0.200	1.000	1.500	20
32CF200010	F16	0.200	1.000	1.500	20
38CF200010	F19	0.200	1.000	1.500	20
24CF250005	F302	0.250	0.500	1.500	20
31CF250005	F14	0.250	0.500	1.500	20
32CF250005	F16	0.250	0.500	1.500	20
38CF250005	F19	0.250	0.500	1.500	20
24CF250007	F302	0.250	0.750	1.500	20
31CF250007	F14	0.250	0.750	1.500	20
32CF250007	F16	0.250	0.750	1.500	20
38CF250007	F19	0.250	0.750	1.500	20

416-251-2831

MMG/NEOSID (CANADA) LIMITED FERRITE COIL FORMS

PART NUMBER	MAT'L	O.D. inches	LENGTH inches	WIRE LENGTH inches	WIRE AWG
24CF250008	F302	0.250	0.875	1.500	20
31CF250008	F14	0.250	0.875	1.500	20
32CF250008	F16	0.250	0.875	1.500	20
38CF250008	F19	0.250	0.875	1.500	20
24CF250010	F302	0.250	1.000	1.500	20
31CF250010	F14	0.250	1.000	1.500	20
32CF250010	F16	0.250	1.000	1.500	20
38CF250010	F19	0.250	1.000	1.500	20
24CF250012	F302	0.250	1.250	1.500	20
31CF250012	F14	0.250	1.250	1.500	20
32CF250012	F16	0.250	1.250	1.500	20
38CF250012	F19	0.250	1.250	1.500	20
24CF250015	F302	0.250	1.500	1.500	20
31CF250015	F14	0.250	1.500	1.500	20
32CF250015	F16	0.250	1.500	1.500	20
38CF250015	F19	0.250	1.500	1.500	20
24CF375010	F302	0.375	1.000	1.500	20
31CF375010	F14	0.375	1.000	1.500	20
32CF375010	F16	0.375	1.000	1.500	20
38CF375010	F19	0.375	1.000	1.500	20
24CF375012	F302	0.375	1.250	1.500	20
31CF375012	F14	0.375	1.250	1.500	20
32CF375012	F16	0.375	1.250	1.500	20
38CF375012	F19	0.375	1.250	1.500	20
24CF375015	F302	0.375	1.500	1.500	20
31CF375015	F14	0.375	1.500	1.500	20
32CF375015	F16	0.375	1.500	1.500	20
38CF375015	F19	0.375	1.500	1.500	20
24CF437010	F302	0.437	1.000	1.500	20
31CF437010	F14	0.437	1.000	1.500	20
32CF437010	F16	0.437	1.000	1.500	20
38CF437010	F19	0.437	1.000	1.500	20

MMG/NEOSID (CANADA) LIMITED FERRITE COIL FORMS

PART NUMBER	MAT'L	O.D. inches	LENGTH inches	WIRE LENGTH inches	AWG
24CF437012	F302	0.437	1.250	1.500	20
31CF437012	F14	0.437	1.250	1.500	20
32CF437012	F16	0.437	1.250	1.500	20
38CF437012	F19	0.437	1.250	1.500	20
24CF437015	F302	0.437	1.500	1.500	20
31CF437015	F14	0.437	1.500	1.500	20
32CF437015	F16	0.437	1.500	1.500	20
38CF437015	F19	0.437	1.500	1.500	20

** NEOSID HAD INCORPORATED INTO ITS PART NUMBER THE LENGTH AND GAUGE THE LEAD WIRE. THE "F" IN THE PART NUMBER INDICATES A #20 X 1.5" LEAD. TO SPECIFY A DIFFERENT LEAD WIRE, NEOSID HAS AVAILABLE AS FOLLOWS:

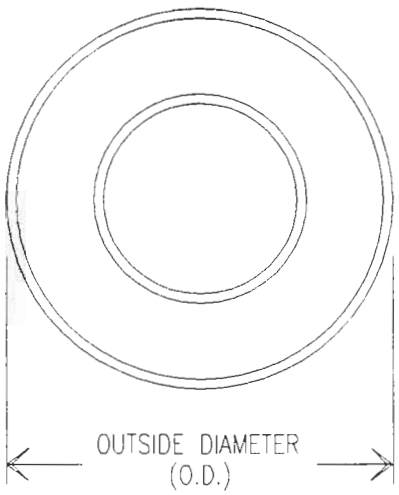
G - #22 X 1.5" LEAD WIRE
D - #18 X 1.75" LEAD WIRE
E - #18 X 1.5" LEAD WIRE
IF ANOTHER SIZE OF LENGTH IS REQUIRED PLEASE CONTACT THE FACTORY

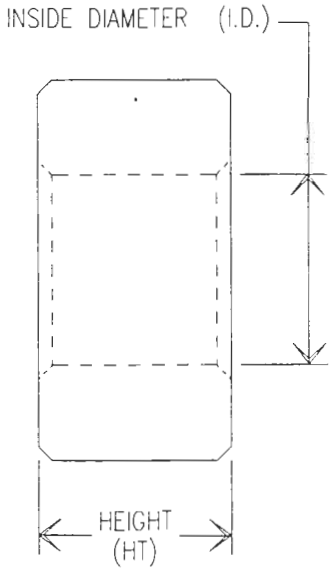
416-251-2831

MMG/NEOSID (CANADA) LIMITED IRON POWDER COILFORMS

PART NUMBER	MAT'L	O.D. inches	LENGTH inches	WIRE LENGTH inches	WIRE AWG
01CG107001	CARB "E"	0.107	0.312	1.500	22
05CG107001	CARB "SF"	0.107	0.312	1.500	22
10CG107001	CARB "C"	0.107	0.312	1.500	22
01CG107003	CARB "E"	0.107	0.375	1.500	22
05CG107003	CARB "SF"	0.107	0.375	1.500	22
10CG107003	CARB "C"	0.107	0.375	1.500	22
01CG125003	CARB "E"	0.125	0.375	1.500	22
05CG125003	CARB "SF"	0.125	0.375	1.500	22
10CG125003	CARB "C"	0.125	0.375	1.500	22
01CG125005	CARB "E"	0.125	0.500	1.500	22
05CG125005	CARB "SF"	0.125	0.500	1.500	22
10CG125005	CARB "C"	0.125	0.500	1.500	22
01CF217007	CARB "E"	0.217	0.750	1.500	20
05CF217007	CARB "SF"	0.217	0.750	1.500	20
10CF217007	CARB "C"	0.217	0.750	1.500	20
01CF217008	CARB "E"	0.217	0.875	1.500	20
05CF217008	CARB "SF"	0.217	0.875	1.500	20
10CF217008	CARB "C"	0.217	0.875	1.500	20
01CF250007	CARB "E"	0.250	0.750	1.500	20
05CF250007	CARB "SF"	0.250	0.750	1.500	20
10CF250007	CARB "C"	0.250	0.750	1.500	20
01CF250001	CARB "E"	0.250	1.000	1.500	20
05CF250001	CARB "SF"	0.250	1.000	1.500	20
10CF250001	CARB "C"	0.250	1.000	1.500	20
01CF250012	CARB "E"	0.250	1.250	1.500	20
05CF250012	CARB "SF"	0.250	1.250	1.500	20
10CF250012	CARB "C"	0.250	1.250	1.500	20
01CF375001	CARB "E"	0.375	1.000	1.500	20
05CF375001	CARB "SF"	0.375	1.000	1.500	20
10CF375001	CARB "C"	0.375	1.000	1.500	20
01CF375012	CARB "E"	0.375	1.250	1.500	20
05CF375012	CARB "SF"	0.375	1.250	1.500	20
10CF375012	CARB "C"	0.375	1.250	1.500	20

MMG/NEOSID (CANADA) LIMITED
FERRITE TOROIDS





The tables show the AL values for cores whose dimensions are such that the cross sectional area is approximately square. Any core can be adjusted to obtain a specified height of AL value. This of course is limited by existing tooling.

Generally the height limitations are about 1/2" for smaller cores, and about 1" for larger diameters.

Since toroid tooling is relatively simple, Neosid is glad to quote on any size that you may require, if it does not appear in our catalogue.

Neosid is also pleased to offer all of the listed toroids in our high frequency materials, F25 and F29. Since these raw materials are different from other nickel zinc ferrites, the sizes are approximately 5% to 10% larger in O.D. and I.D. For additional details or to find out what sizes are normally stocked, either contact your local distributor or the factory.

For material characteristics please refer to Neosid's Technical Information catalogue.

MMG/NEOSID (CANADA) LIMITED FERRITE TOROIDS

PART NUMBER	O.D. inches	I.D. inches	HT. inches	MAT'L
30T0230060	.230	.120	.060	F13
31T0230060	.230	.120	.060	F14
32T0230060	.230	.120	.060	F16
38T0230060	.230	.120	.060	F19
24T0230060	.230	.120	.060	F302
30U0315085	.315	.145	.085	F13
31U0315085	.315	.145	.085	F14
32U0315085	.315	.145	.085	F16
38U0315085	.315	.145	.085	F19
24U0315085	.315	.145	.085	F302
30U0370085	.370	.200	.085	F13
31U0370085	.370	.200	.085	F14
32U0370085	.370	.200	.085	F16
38U0370085	.370	.200	.085	F19
24U0370085	.370	.200	.085	F302
30U0375125	.375	.200	.125	F13
31U0375125	.375	.200	.125	F14
32U0375125	.375	.200	.125	F16
38U0375125	.375	.200	.125	F19
24U0375125	.375	.200	.125	F302
30U0375190	.375	.200	.190	F13
30U0375190	.375	.200	.190	F14
30U0375190	.375	.200	.190	F16
30U0375190	.375	.200	.190	F19
30U0375190	.375	.200	.190	F302
30U0420085	.420	.250	.085	F13
31U0420085	.420	.250	.085	F14
32U0420085	.420	.250	.085	F16
38U0420085	.420	.250	.085	F19
24U0420085	.420	.250	.085	F302
30U0470100	.470	.270	.100	F13
31U0470100	.470	.270	.100	F14
32U0470100	.470	.270	.100	F16
38U0470100	.470	.270	.100	F19
24U0470100	.470	.270	.100	F302
30U0500040	.500	.312	.250	F13
31U0500040	.500	.312	.250	F14
32U0500040	.500	.312	.250	F16
38U0500040	.500	.312	.250	F19
24U0500040	.500	.312	.250	F302

MMG/NEOSID (CANADA) LIMITED FERRITE TOROIDS

PART NUMBER	Ae mm^2	le mm	Ve mm^3	AL nH
30T0230060	2.13	13.96	29.73	125
31T0230060	2.13	13.96	29.73	42
32T0230060	2.13	13.96	29.73	24
38T0230060	2.13	13.96	29.73	192
24T0230060	2.13	13.96	29.73	62
30U0315085	4.67	18.35	85.60	208
31U0315085	4.67	18.35	85.60	70
32U0315085	4.67	18.35	85.60	40
38U0315085	4.67	18.35	85.60	320
24U0315085	4.67	18.35	85.60	104
30U0370085	4.66	22.75	106.10	167
31U0370085	4.66	22.75	106.10	56
32U0370085	4.66	22.75	106.10	32
38U0370085	4.66	22.75	106.10	258
24U0370085	4.66	22.75	106.10	84
30U0375125	7.06	22.94	161.90	251
31U0375125	7.06	22.94	161.90	85
32U0375125	7.06	22.94	161.90	48
38U0375125	7.06	22.94	161.90	386
24U0375125	7.06	22.94	161.90	126
30U0375190	10.72	22.94	246.00	382
31U0375190	10.72	22.94	246.00	129
32U0375190	10.72	22.94	246.00	73
38U0375190	10.72	22.94	246.00	587
24U0375190	10.72	22.94	246.00	191
30U0420085	4.70	26.78	125.80	143
31U0420085	4.70	26.78	125.80	48
32U0420085	4.70	26.78	125.80	28
38U0420085	4.70	26.78	125.80	220
24U0420085	4.70	26.78	125.80	71
30U0470100	6.40	29.47	188.60	177
31U0470100	6.40	29.47	188.60	60
32U0470100	6.40	29.47	188.60	34
38U0470100	6.40	29.47	188.60	275
24U0470100	6.40	29.47	188.60	89
30U0500040	15.16	32.40	491.20	382
31U0500040	15.16	32.40	491.20	129
32U0500040	15.16	32.40	491.20	74
38U0500040	15.16	32.40	491.20	588
24U0500040	15.16	32.40	491.20	191

416-251-2831

MMG/NEOSID (CANADA) LIMITED FERRITE TOROIDS

PART NUMBER	O.D. inches	I.D. inches	HT. inches	MAT'L
30U0575125	.575	.320	.125	F13
31U0575125	.575	.320	.125	F14
32U0575125	.575	.320	.125	F16
38U0575125	.575	.320	.125	F19
24U0575125	.575	.320	.125	F302
30U0625185	.625	.350	.185	F13
31U0625185	.625	.350	.185	F14
32U0625185	.625	.350	.185	F16
38U0625185	.625	.350	.185	F19
24U0625185	.625	.350	.185	F302
30U0690125	.690	.430	.125	F13
31U0690125	.690	.430	.125	F14
32U0690125	.690	.430	.125	F16
38U0690125	.690	.430	.125	F19
24U0690125	.690	.430	.125	F302
30U0820200	.820	.420	.200	F13
31U0820200	.820	.420	.200	F14
32U0820200	.820	.420	.200	F16
38U0820200	.820	.420	.200	F19
24U0820200	.820	.420	.200	F302
30U0895205	.895	.480	.205	F13
31U0895205	.895	.480	.205	F14
32U0895205	.895	.480	.205	F16
38U0895205	.895	.480	.205	F19
24U0895205	.895	.480	.205	F302
30U0895250	.895	.480	.250	F13
31U0895250	.895	.480	.250	F14
32U0895250	.895	.480	.250	F16
38U0895250	.895	.480	.250	F19
24U0895250	.895	.480	.250	F302
30U0970250	.970	.480	.250	F13
31U0970250	.970	.480	.250	F14
32U0970250	.970	.480	.250	F16
38U0970250	.970	.480	.250	F19
24U0970250	.970	.480	.250	F302
30V1090215	1.090	.655	.215	F13
31V1090215	1.090	.655	.215	F14
32V1090215	1.090	.655	.215	F16
38V1090215	1.090	.655	.215	F19
24V1090215	1.090	.655	.215	F302

MMG/NEOSID (CANADA) LIMITED FERRITE TOROIDS

PART NUMBER	Ae mm^2	le mm	Ve mm^3	AL nH
30U0575125	10.26	35.70	366.20	235
31U0575125	10.26	35.70	366.20	79
32U0575125	10.26	35.70	366.20	45
38U0575125	10.26	35.70	366.20	361
24U0575125	10.26	35.70	366.20	118
30U0625185	16.41	38.90	638.40	344
31U0625185	16.41	38.90	638.40	117
32U0625185	16.41	38.90	638.40	66
38U0625185	16.41	38.90	638.40	529
24U0625185	16.41	38.90	638.40	172
30U0690125	10.46	44.61	466.70	191
31U0690125	10.46	44.61	466.70	65
32U0690125	10.46	44.61	466.70	37
38U0690125	10.46	44.61	466.70	294
24U0690125	10.46	44.61	466.70	96
30U0820200	25.65	49.48	1269.00	424
31U0820200	25.65	49.48	1269.00	143
32U0820200	25.65	49.48	1269.00	81
38U0820200	25.65	49.48	1269.00	652
24U0820200	25.65	49.48	1269.00	213
30U0895205	27.44	54.86	1506.00	408
31U0895205	27.44	54.86	1506.00	138
32U0895205	27.44	54.86	1506.00	79
38U0895205	27.44	54.86	1506.00	628
24U0895205	27.44	54.86	1506.00	204
30U0895250	33.47	54.86	1836.00	499
31U0895250	33.47	54.86	1836.00	169
32U0895250	33.47	54.86	1836.00	96
38U0895250	33.47	54.86	1836.00	767
24U0895250	33.47	54.86	1836.00	249
30U0970250	39.52	57.85	2286.00	558
31U0970250	39.52	57.85	2286.00	189
32U0970250	39.52	57.85	2286.00	107
38U0970250	39.52	57.85	2286.00	859
24U0970250	39.52	57.85	2286.00	279
30V1090215	29.48	70.06	2066.00	354
31V1090215	29.48	70.06	2066.00	120
32V1090215	29.48	70.06	2066.00	68
38V1090215	29.48	70.06	2066.00	545
24V1090215	29.48	70.06	2066.00	177

416-251-2831

MMG/NEOSID (CANADA) LIMITED FERRITE TOROIDS

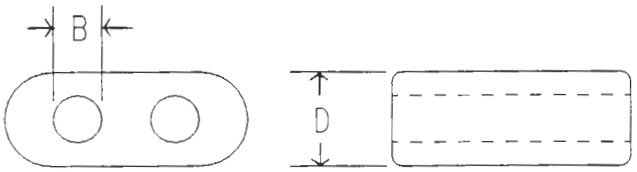
PART NUMBER	O.D. inches	I.D. inches	HT. inches	MAT'L
30V1102787	1.100	.665	.787	F13
31V1102787	1.100	.665	.787	F14
32V1102787	1.100	.665	.787	F16
38V1102787	1.100	.665	.787	F19
24V1102787	1.100	.665	.787	F302
30V1225315	1.225	.750	.315	F13
31V1225315	1.225	.750	.315	F14
32V1225315	1.225	.750	.315	F16
38V1225315	1.225	.750	.315	F19
24V1225315	1.225	.750	.315	F302
30V1225630	1.225	.750	.630	F13
31V1225630	1.225	.750	.630	F14
32V1225630	1.225	.750	.630	F16
38V1225630	1.225	.750	.630	F19
24V1225630	1.225	.750	.630	F302
30V1320250	1.320	.800	.250	F13
31V1320250	1.320	.800	.250	F14
32V1320250	1.320	.800	.250	F16
38V1320250	1.320	.800	.250	F19
24V1320250	1.320	.800	.250	F302
30V1560375	1.560	.785	.375	F13
31V1560375	1.560	.785	.375	F14
32V1560375	1.560	.785	.375	F16
38V1560375	1.560	.785	.375	F19
24V1560375	1.560	.785	.375	F302
30V1690315	1.690	1.050	.315	F13
31V1690315	1.690	1.050	.315	F14
32V1690315	1.690	1.050	.315	F16
38V1690315	1.690	1.050	.315	F19
24V1690315	1.690	1.050	.315	F302
30V2550460	2.550	1.630	.460	F13
31V2550460	2.550	1.630	.460	F14
32V2550460	2.550	1.630	.460	F16
38V2550460	2.550	1.630	.460	F19
24V2550460	2.550	1.630	.460	F302
30v2250001	2.550	1.630	1.000	F13
31v2250001	2.550	1.630	1.000	F14
32v2250001	2.550	1.630	1.000	F16
38v2250001	2.550	1.630	1.000	F19
24v2250001	2.550	1.630	1.000	F302

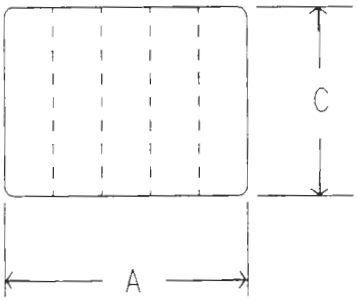
MMG/NEOSID (CANADA) LIMITED FERRITE TOROIDS

PART NUMBER	Ae mm^2	le mm	Ve mm^3	AL nH
30V1102787	110.90	70.50	7821	1280
31V1102787	110.90	70.50	7821	435
32V1102787	110.90	70.50	7821	247
38V1102787	110.90	70.50	7821	1970
24V1102787	110.90	70.50	7821	640
30V1225315	48.26	78.80	3803	500
31V1225315	48.26	78.80	3803	169
32V1225315	48.26	78.80	3803	96
38V1225315	48.26	78.80	3803	770
24V1225315	48.26	78.80	3803	250
30V1225630	96.53	78.80	7606	1000
31V1225630	96.53	78.80	7606	339
32V1225630	96.53	78.80	7606	192
38V1225630	96.53	78.80	7606	1539
24V1225630	96.53	78.80	7606	500
30V1320250	41.94	84.58	3547	405
31V1320250	41.94	84.58	3547	137
32V1320250	41.94	84.58	3547	78
38V1320250	41.94	84.58	3547	624
24V1320250	41.94	84.58	3547	202
30V1560375	93.75	93.56	8771	818
31V1560375	93.75	93.56	8771	277
32V1560375	93.75	93.56	8771	157
38V1560375	93.75	93.56	8771	1259
24V1560375	93.75	93.56	8771	409
30V1690315	65.03	109.30	7109	486
31V1690315	65.03	109.30	7109	164
32V1690315	65.03	109.30	7109	93
38V1690315	65.03	109.30	7109	747
24V1690315	65.03	109.30	7109	243
30V2550460	136.50	166.80	22767	668
31V2550460	136.50	166.80	22767	226
32V2550460	136.50	166.80	22767	128
38V2550460	136.50	166.80	22767	1028
24V2550460	136.50	166.80	22767	334
30V2550001	296.80	166.80	49494	1454
31V2550001	296.80	166.80	49494	492
32V2550001	296.80	166.80	49494	280
38V2550001	296.80	166.80	49494	2236
24V2550001	296.80	166.80	49494	727

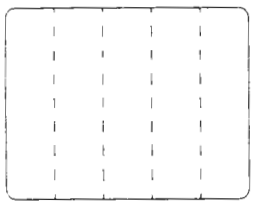
416-251-2831

MMG/NEOSID (CANADA) LIMITED
BALUN CORES





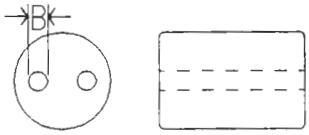
2 HOLE
STYLE BF

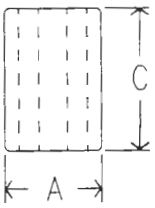


2 HOLE
STYLE BG

Originally designed for one specific purpose, balun cores are now used in a wide variety of applications. These range from wideband to pulse and even interference supression.

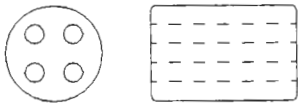
Neosid is tooled for a wide range of balun cores. These range in size from about 1/8" to over 1", and styles from 2 hole to 6 hole.



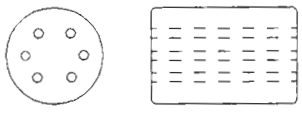


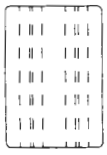
2 HOLE
STYLE BH

The BL style is the same as the BH with the addition of a winding slot along length " C " adjacent to both holes.



4 HOLE
STYLE BJ





6 HOLE
STYLE BK

The materials and sizes that are listed are suitable for most applications; however, if a higher frequency material is desired, any of Neosid's styles and sizes can be manufactured in our F25 or F29 materials. Please contact the factory for further information.

MMG/NEOSID (CANADA) LIMITED FERRITE BALUNS

PART NUMBER	"A" Inches	"B" Inches	"C" Inches	"D" Inches	STYLE	MATERIAL
30BF135040	0.135	0.035	0.040	0.080	B F	F13
31BF135040	0.135	0.035	0.040	0.080	B F	F14
32BF135040	0.135	0.035	0.040	0.080	B F	F16
38BF135040	0.135	0.035	0.040	0.080	B F	F19
24BF135040	0.135	0.035	0.040	0.080	B F	F302
30BF135090	0.135	0.035	0.090	0.080	B F	F13
31BF135090	0.135	0.035	0.090	0.080	B F	F14
32BF135090	0.135	0.035	0.090	0.080	B F	F16
38BF135090	0.135	0.035	0.090	0.080	B F	F19
24BF135090	0.135	0.035	0.090	0.080	B F	F302
30BF135165	0.135	0.035	0.165	0.080	B F	F13
31BF135165	0.135	0.035	0.165	0.080	B F	F14
32BF135165	0.135	0.035	0.165	0.080	B F	F16
38BF135165	0.135	0.035	0.165	0.080	B F	F19
24BF135165	0.135	0.035	0.165	0.080	B F	F302
30BF275125	0.275	0.070	0.125	0.160	B F	F13
31BF275125	0.275	0.070	0.125	0.160	B F	F14
32BF275125	0.275	0.070	0.125	0.160	B F	F16
38BF275125	0.275	0.070	0.125	0.160	B F	F19
24BF275125	0.275	0.070	0.125	0.160	B F	F302
30BF275160	0.275	0.070	0.160	0.160	B F	F13
31BF275160	0.275	0.070	0.160	0.160	B F	F14
32BF275160	0.275	0.070	0.160	0.160	B F	F16
38BF275160	0.275	0.070	0.160	0.160	B F	F19
24BF275160	0.275	0.070	0.160	0.160	B F	F302
30BF275250	0.275	0.070	0.250	0.160	B F	F13
31BF275250	0.275	0.070	0.250	0.160	B F	F14
32BF275250	0.275	0.070	0.250	0.160	B F	F16
38BF275250	0.275	0.070	0.250	0.160	B F	F19
24BF275250	0.275	0.070	0.250	0.160	B F	F302

416-251-2831

MMG/NEOSID (CANADA) LIMITED FERRITE BALUNS

PART NUMBER	"A" Inches	"B" Inches	"C" Inches	"D" Inches	STYLE	MATERIAL
30BF545250	0.545	0.155	0.250	0.300	B F	F13
31BF545250	0.545	0.155	0.250	0.300	B F	F14
32BF545250	0.545	0.155	0.250	0.300	B F	F16
38BF545250	0.545	0.155	0.250	0.300	B F	F19
24BF545250	0.545	0.155	0.250	0.300	B F	F302
30BF545410	0.545	0.155	0.410	0.300	B F	F13
31BF545410	0.545	0.155	0.410	0.300	B F	F14
32BF545410	0.545	0.155	0.410	0.300	B F	F16
38BF545410	0.545	0.155	0.410	0.300	B F	F19
24BF545410	0.545	0.155	0.410	0.300	B F	F302
30BF545550	0.545	0.155	0.550	0.300	B F	F13
31BF545550	0.545	0.155	0.550	0.300	B F	F14
32BF545550	0.545	0.155	0.550	0.300	B F	F16
38BF545550	0.545	0.155	0.550	0.300	B F	F19
24BF545550	0.545	0.155	0.550	0.300	B F	F302
30BG315190	0.315	0.085	0.190	0.175	B G	F13
31BG315190	0.315	0.085	0.190	0.175	B G	F14
32BG315190	0.315	0.085	0.190	0.175	B G	F16
38BG315190	0.315	0.085	0.190	0.175	B G	F19
24BG315190	0.315	0.085	0.190	0.175	B G	F302
30BG315312	0.315	0.085	0.312	0.175	B G	F13
31BG315312	0.315	0.085	0.312	0.175	B G	F14
32BG315312	0.315	0.085	0.312	0.175	B G	F16
38BG315312	0.315	0.085	0.312	0.175	B G	F19
24BG315312	0.315	0.085	0.312	0.175	B G	F302
30BG750500	0.750	0.187	0.500	0.375	B G	F13
31BG750500	0.750	0.187	0.500	0.375	B G	F14
32BG750500	0.750	0.187	0.500	0.375	B G	F16
38BG750500	0.750	0.187	0.500	0.375	B G	F19
24BG750500	0.750	0.187	0.500	0.375	B G	F302

MMG/NEOSID (CANADA) LIMITED FERRITE BALUNS

PART NUMBER	"A" Inches	"B" Inches	"C" Inches	"D" Inches	STYLE	MATERIAL
30BG750750	0.750	0.187	0.750	0.375	B G	F13
31BG750750	0.750	0.187	0.750	0.375	B G	F14
32BG750750	0.750	0.187	0.750	0.375	B G	F16
38BG750750	0.750	0.187	0.750	0.375	B G	F19
24BG750750	0.750	0.187	0.750	0.375	B G	F302
30BG750010	0.750	0.187	1.000	0.375	B G	F13
31BG750010	0.750	0.187	1.000	0.375	B G	F14
32BG750010	0.750	0.187	1.000	0.375	B G	F16
38BG750010	0.750	0.187	1.000	0.375	B G	F19
24BG750010	0.750	0.187	1.000	0.375	B G	F302
30BG1X1500	1.125	0.290	0.500	0.560	B G	F13
31BG1X1500	1.125	0.290	0.500	0.560	B G	F14
32BG1X1500	1.125	0.290	0.500	0.560	B G	F16
38BG1X1500	1.125	0.290	0.500	0.560	B G	F19
24BG1X1500	1.125	0.290	0.500	0.560	B G	F302
30BG1X1750	1.125	0.290	0.750	0.560	B G	F13
31BG1X1750	1.125	0.290	0.750	0.560	B G	F14
32BG1X1750	1.125	0.290	0.750	0.560	B G	F16
38BG1X1750	1.125	0.290	0.750	0.560	B G	F19
24BG1X1750	1.125	0.290	0.750	0.560	B G	F302
30BG1X11X1	1.125	0.290	1.125	0.560	B G	F13
31BG1X11X1	1.125	0.290	1.125	0.560	B G	F14
32BG1X11X1	1.125	0.290	1.125	0.560	B G	F16
38BG1X11X1	1.125	0.290	1.125	0.560	B G	F19
24BG1X11X1	1.125	0.290	1.125	0.560	B G	F302
30BH245125	0.245	0.050	0.125	----	B H	F13
31BH245125	0.245	0.050	0.125	----	B H	F14
32BH245125	0.245	0.050	0.125	----	B H	F16
38BH245125	0.245	0.050	0.125	----	B H	F19
24BH245125	0.245	0.050	0.125	----	B H	F302

416-251-2831

MMG/NEOSID (CANADA) LIMITED FERRITE BALUNS

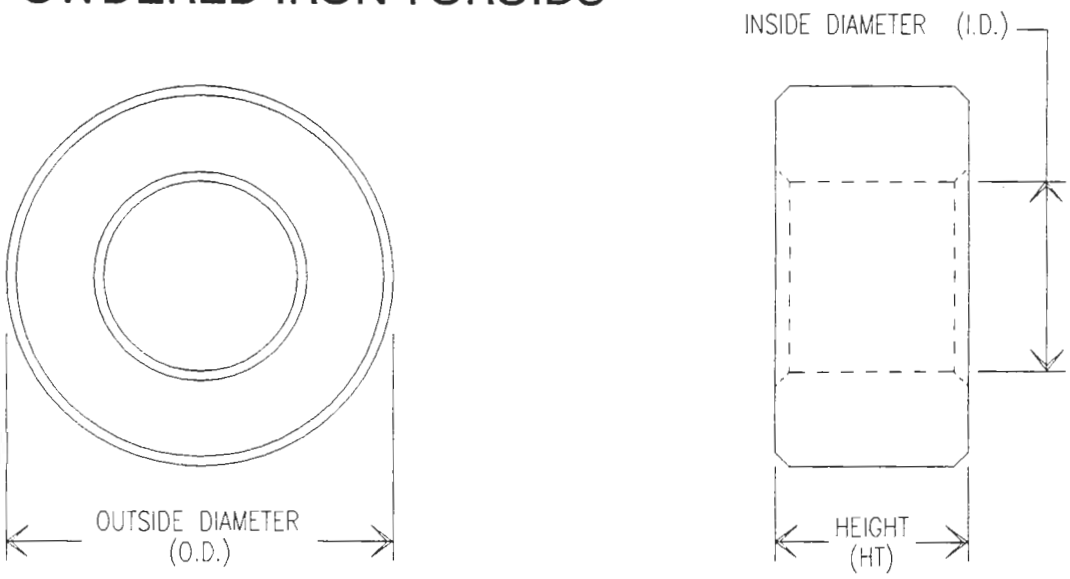
PART NUMBER	"A" Inches	"B" Inches	"C" Inches	"D" Inches	STYLE	MATERIAL
30BH245200	0.245	0.050	0.200	----	B H	F13
31BH245200	0.245	0.050	0.200	----	B H	F14
32BH245200	0.245	0.050	0.200	----	B H	F16
38BH245200	0.245	0.050	0.200	----	B H	F19
24BH245200	0.245	0.050	0.200	----	B H	F302
30BH245250	0.245	0.050	0.250	----	B H	F13
31BH245250	0.245	0.050	0.250	----	B H	F14
32BH245250	0.245	0.050	0.250	----	B H	F16
38BH245250	0.245	0.050	0.250	----	B H	F19
24BH245250	0.245	0.050	0.250	----	B H	F302
30BH245500	0.245	0.050	0.500	----	B H	F13
31BH245500	0.245	0.050	0.500	----	B H	F14
32BH245500	0.245	0.050	0.500	----	B H	F16
38BH245500	0.245	0.050	0.500	----	B H	F19
24BH245500	0.245	0.050	0.500	----	B H	F302
30BJ245125	0.245	0.050	0.125	----	B J	F13
31BJ245125	0.245	0.050	0.125	----	B J	F14
32BJ245125	0.245	0.050	0.125	----	B J	F16
38BJ245125	0.245	0.050	0.125	----	B J	F19
24BJ245125	0.245	0.050	0.125	----	B J	F302
30BJ245250	0.245	0.050	0.250	----	B J	F13
31BJ245250	0.245	0.050	0.250	----	B J	F14
32BJ245250	0.245	0.050	0.250	----	B J	F16
38BJ245250	0.245	0.050	0.250	----	B J	F19
24BJ245250	0.245	0.050	0.250	----	B J	F302
30BK245250	0.245	0.034	0.250	----	B K	F13
31BK245250	0.245	0.034	0.250	----	B K	F14
32BK245250	0.245	0.034	0.250	----	B K	F16
38BK245250	0.245	0.034	0.250	----	B K	F19
24BK245250	0.245	0.034	0.250	----	B K	F302

MMG/NEOSID (CANADA) LIMITED FERRITE BALUNS

PART NUMBER	"A" Inches	"B" Inches	"C" Inches	"D" Inches	STYLE	MATERIAL
30BK245395	0.245	0.034	0.395	----	B K	F13
31BK245395	0.245	0.034	0.395	----	B K	F14
32BK245395	0.245	0.034	0.395	----	B K	F16
38BK245395	0.245	0.034	0.395	----	B K	F19
24BK245395	0.245	0.034	0.395	----	B K	F302
30BL265125	0.265	0.050	0.125	----	B L	F13
31BL265125	0.265	0.050	0.125	----	B L	F14
32BL265125	0.265	0.050	0.125	----	B L	F16
38BL265125	0.265	0.050	0.125	----	B L	F19
24BL265125	0.265	0.050	0.125	----	B L	F302
30BL265250	0.265	0.050	0.250	----	B L	F13
31BL265250	0.265	0.050	0.250	----	B L	F14
32BL265250	0.265	0.050	0.250	----	B L	F16
38BL265250	0.265	0.050	0.250	----	B L	F19
24BL265250	0.265	0.050	0.250	----	B L	F302
30BL265375	0.265	0.050	0.375	----	B L	F13
31BL265375	0.265	0.050	0.375	----	B L	F14
32BL265375	0.265	0.050	0.375	----	B L	F16
38BL265375	0.265	0.050	0.375	----	B L	F19
24BL265375	0.265	0.050	0.375	----	B L	F302

416-251-2831

MMG/NEOSID (CANADA) LIMITED
POWDERED IRON TOROIDS



GENERAL MATERIAL PROPERTIES

MATERIAL CODE	CORE COLOUR CODE	REFERENCE PERMEABILITY	INDUCTANCE TOLERANCE	BASIC MATERIAL
01	RED	10	±10%	CARBONYL E
05	YELLOW/RED	8.5	±10%	CARBONYL SF
08	GREEN/BLUE	4.0	±10%	SYNTHETIC OXIDE
12	ORANGE	35	±10%	CARBONYL GQ4
14	PURPLE	33	±10%	NEOSID MIX 14
16	BROWN	60	±10%	NEOSID MIX 16
17	GREEN	75	±10%	NEOSID MIX 17
20	BLUE/YELLOW	22	±10%	NEOSID MIX 20

* NEOSID MIXES 18 AND 19 ARE NOT FOR NEW DESIGN, BUT ARE STILL AVAILABLE FOR EXISTING DESIGNS
FOR NEW DESIGNS USE MIX 16 AND 20

** For additional Iron powder material data See page 48

Notes

All toroids are deburred to reduce sharp edges and supplied with a hard smooth thermo-set coating

All dimensions listed are nominal before coating (Typical coating thickness 0.003 in.)

Minimum dielectric breakdown of the coating is 500 volts.

TOLERANCES

Dimensions under 0.250"	± 0.010"
0.250" to under 1.0"	± 0.020"
1.0" and over	± 0.030"

Tolerance on all AL values is normally ± 10%.

If there is an application that requires a different tolerance than those outlined in this catalogue, please do not hesitate to contact the factory

MMG/NEOSID (CANADA) LIMITED IRON POWDER TOROIDS

PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01U0370001	.375	.175	.190	2.19	.123	.268	70
05U0370001	.375	.175	.190	2.19	.123	.268	60
08U0370001	.375	.175	.190	2.19	.123	.268	28
12U0370001	.375	.175	.190	2.19	.123	.268	245
14U0370001	.375	.175	.190	2.19	.123	.268	230
16U0370001	.375	.175	.190	2.19	.123	.268	400
17U0370001	.375	.175	.190	2.19	.123	.268	470
20U0370001	.375	.175	.190	2.19	.123	.268	154
01U0370002	.375	.200	.128	2.29	.073	.167	40
05U0370002	.375	.200	.128	2.29	.073	.167	30
08U0370002	.375	.200	.128	2.29	.073	.167	15
12U0370002	.375	.200	.128	2.29	.073	.167	120
14U0370002	.375	.200	.128	2.29	.073	.167	130
16U0370002	.375	.200	.128	2.29	.073	.167	225
17U0370002	.375	.200	.128	2.29	.073	.167	275
20U0370002	.375	.200	.128	2.29	.073	.167	87
01U0440001	.440	.235	.160	2.68	.106	.284	52
05U0440001	.440	.235	.160	2.68	.106	.284	42
08U0440001	.440	.235	.160	2.68	.106	.284	18
12U0440001	.440	.235	.160	2.68	.106	.284	172
14U0440001	.440	.235	.160	2.68	.106	.284	162
16U0440001	.440	.235	.160	2.68	.106	.284	300
17U0440001	.440	.235	.160	2.68	.106	.284	360
20U0440001	.440	.235	.160	2.68	.106	.284	108

416-251-2831

MMG/NEOSID (CANADA) LIMITED IRON POWDER TOROIDS

PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01U0500005	.500	.200	.250	2.79	.242	.675	105
05U0500005	.500	.200	.250	2.79	.242	.675	90
08U0500005	.500	.200	.250	2.79	.242	.675	44
12U0500005	.500	.200	.250	2.79	.242	.675	370
14U0500005	.500	.200	.250	2.79	.242	.675	360
16U0500005	.500	.200	.250	2.79	.242	.675	650
17U0500005	.500	.200	.250	2.79	.242	.675	800
20U0500005	.500	.200	.250	2.79	.242	.675	239
01U0500001	.500	.300	.190	3.19	.123	.392	49
05U0500001	.500	.300	.190	3.19	.123	.392	40
08U0500001	.500	.300	.190	3.19	.123	.392	18
12U0500001	.500	.300	.190	3.19	.123	.392	170
14U0500001	.500	.300	.190	3.19	.123	.392	160
16U0500001	.500	.300	.190	3.19	.123	.392	285
17U0500001	.500	.300	.190	3.19	.123	.392	320
20U0500001	.500	.300	.190	3.19	.123	.392	105
01U0500002	.500	.300	.250	3.19	.161	.514	63
05U0500002	.500	.300	.250	3.19	.161	.514	54
08U0500002	.500	.300	.250	3.19	.161	.514	25
12U0500002	.500	.300	.250	3.19	.161	.514	222
14U0500002	.500	.300	.250	3.19	.161	.514	210
16U0500002	.500	.300	.250	3.19	.161	.514	370
17U0500002	.500	.300	.250	3.19	.161	.514	420
20U0500002	.500	.300	.250	3.19	.161	.514	140

MMG/NEOSID (CANADA) LIMITED IRON POWDER TOROIDS

PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01U0560001	.560	.320	.190	3.51	.147	.516	53
05U0560001	.560	.320	.190	3.51	.147	.516	45
08U0560001	.560	.320	.190	3.51	.147	.516	21
12U0560001	.560	.320	.190	3.51	.147	.516	185
14U0560001	.560	.320	.190	3.51	.147	.516	173
16U0560001	.560	.320	.190	3.51	.147	.516	310
17U0560001	.560	.320	.190	3.51	.147	.516	340
20U0560001	.560	.320	.190	3.51	.147	.516	116
01U0560002	.560	.320	.250	3.51	.193	.677	69
05U0560002	.560	.320	.250	3.51	.193	.677	59
08U0560002	.560	.320	.250	3.51	.193	.677	28
12U0560002	.560	.320	.250	3.51	.193	.677	240
14U0560002	.560	.320	.250	3.51	.193	.677	228
16U0560002	.560	.320	.250	3.51	.193	.677	410
17U0560002	.560	.320	.250	3.51	.193	.677	490
20U0560002	.560	.320	.250	3.51	.193	.677	150
01U0680001	.680	.380	.190	4.23	.184	.778	57
05U0680001	.680	.380	.190	4.23	.184	.778	47
08U0680001	.680	.380	.190	4.23	.184	.778	21
12U0680001	.680	.380	.190	4.23	.184	.778	195
14U0680001	.680	.380	.190	4.23	.184	.778	180
16U0680001	.680	.380	.190	4.23	.184	.778	336
17U0680001	.680	.380	.190	4.23	.184	.778	420
20U0680001	.680	.380	.190	4.23	.184	.778	120

416-251-2831

MMG/NEOSID (CANADA) LIMITED IRON POWDER TOROIDS

PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01U0680002	.680	.380	.250	4.23	.242	1.02	70
05U0680002	.680	.380	.250	4.23	.242	1.02	62
08U0680002	.680	.380	.250	4.23	.242	1.02	29
12U0680002	.680	.380	.250	4.23	.242	1.02	252
14U0680002	.680	.380	.250	4.23	.242	1.02	237
16U0680002	.680	.380	.250	4.23	.242	1.02	450
17U0680002	.680	.380	.250	4.23	.242	1.02	560
20U0680002	.680	.380	.250	4.23	.242	1.02	155
01U0680003	.680	.380	.375	4.23	.363	1.53	108
05U0680003	.680	.380	.375	4.23	.363	1.53	92
08U0680003	.680	.380	.375	4.23	.363	1.53	43
12U0680003	.680	.380	.375	4.23	.363	1.53	375
14U0680003	.680	.380	.375	4.23	.363	1.53	355
16U0680003	.680	.380	.375	4.23	.363	1.53	675
17U0680003	.680	.380	.375	4.23	.363	1.53	770
20U0680003	.680	.380	.375	4.23	.363	1.53	237
01U0820001	.820	.510	.250	5.31	.249	1.32	59
05U0820001	.820	.510	.250	5.31	.249	1.32	50
08U0820001	.820	.510	.250	5.31	.249	1.32	24
12U0820001	.820	.510	.250	5.31	.249	1.32	200
14U0820001	.820	.510	.250	5.31	.249	1.32	195
16U0820001	.820	.510	.250	5.31	.249	1.32	380
17U0820001	.820	.510	.250	5.31	.249	1.32	450
20U0820001	.820	.510	.250	5.31	.249	1.32	130

PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01U0820002	.820	.510	.375	5.21	.375	1.95	89
05U0820002	.820	.510	.375	5.21	.375	1.95	75
08U0820002	.820	.510	.375	5.21	.375	1.95	36
12U0820002	.820	.510	.375	5.21	.375	1.95	311
14U0820002	.820	.510	.375	5.21	.375	1.95	293
16U0820002	.820	.510	.375	5.21	.375	1.95	575
17U0820002	.820	.510	.375	5.21	.375	1.95	700
20U0820002	.820	.510	.375	5.21	.375	1.95	195
01U0820003	.820	.510	.500	5.21	.499	2.65	110
05U0820003	.820	.510	.500	5.21	.499	2.65	100
08U0820003	.820	.510	.500	5.21	.499	2.65	47
12U0820003	.820	.510	.500	5.21	.499	2.65	414
14U0820003	.820	.510	.500	5.21	.499	2.65	390
16U0820003	.820	.510	.500	5.21	.499	2.65	760
17U0820003	.820	.510	.500	5.21	.499	2.65	900
20U0820003	.820	.510	.500	5.21	.499	2.65	260
01U0940001	.942	.560	.312	6.00	.385	2.30	84
05U0940001	.942	.560	.312	6.00	.385	2.30	70
08U0940001	.942	.560	.312	6.00	.385	2.30	32
12U0940001	.942	.560	.312	6.00	.385	2.30	282
14U0940001	.942	.560	.312	6.00	.385	2.30	266
16U0940001	.942	.560	.312	6.00	.385	2.30	473
17U0940001	.942	.560	.312	6.00	.385	2.30	590
20U0940001	.942	.560	.312	6.00	.385	2.30	177

416-251-2831

PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01U0970001	.970	.500	.380	5.86	.576	3.37	123
05U0970001	.970	.500	.380	5.86	.576	3.37	104
08U0970001	.970	.500	.380	5.86	.576	3.37	49
12U0970001	.970	.500	.380	5.86	.576	3.37	430
14U0970001	.970	.500	.380	5.86	.576	3.37	405
16U0970001	.970	.500	.380	5.86	.576	3.37	730
17U0970001	.970	.500	.380	5.86	.576	3.37	875
20U0970001	.970	.500	.380	5.86	.576	3.37	270
01V1060001	1.060	.570	.310	6.50	.489	3.18	95
05V1060001	1.060	.570	.310	6.50	.489	3.18	80
08V1060001	1.060	.570	.310	6.50	.489	3.18	38
12V1060001	1.060	.570	.310	6.50	.489	3.18	330
14V1060001	1.060	.570	.310	6.50	.489	3.18	312
16V1060001	1.060	.570	.310	6.50	.489	3.18	560
17V1060001	1.060	.570	.310	6.50	.489	3.18	650
20V1060001	1.060	.570	.310	6.50	.489	3.18	208
01V1060002	1.060	.570	.440	6.50	.694	4.51	135
05V1060002	1.060	.570	.440	6.50	.694	4.51	116
08V1060002	1.060	.570	.440	6.50	.694	4.51	54
12V1060002	1.060	.570	.440	6.50	.694	4.51	450
14V1060002	1.060	.570	.440	6.50	.694	4.51	400
16V1060002	1.060	.570	.440	6.50	.694	4.51	785
17V1060002	1.060	.570	.440	6.50	.694	4.51	900
20V1060002	1.060	.570	.440	6.50	.694	4.51	300

PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01V1060003	1.060	.570	.580	6.50	.694	5.92	170
05V1060003	1.060	.570	.580	6.50	.694	5.92	145
08V1060003	1.060	.570	.580	6.50	.694	5.92	71
12V1060003	1.060	.570	.580	6.50	.694	5.92	620
14V1060003	1.060	.570	.580	6.50	.694	5.92	585
16V1060003	1.060	.570	.580	6.50	.694	5.92	1030
17V1060003	1.060	.570	.580	6.50	.694	5.92	1200
20V1060003	1.060	.570	.580	6.50	.694	5.92	390
01V1300001	1.300	.790	.440	8.34	.724	6.34	110
05V1300001	1.300	.790	.440	8.34	.724	6.34	96
08V1300001	1.300	.790	.440	8.34	.724	6.34	44
12V1300001	1.300	.790	.440	8.34	.724	6.34	350
14V1300001	1.300	.790	.440	8.34	.724	6.34	335
16V1300001	1.300	.790	.440	8.34	.724	6.34	665
17V1300001	1.300	.790	.440	8.34	.724	6.34	785
20V1300001	1.300	.790	.440	8.34	.724	6.34	250
01V1300101	1.300	.640	.440	7.74	.937	7.25	152
05V1300101	1.300	.640	.440	7.74	.937	7.25	129
08V1300101	1.300	.640	.440	7.74	.937	7.25	60
12V1300101	1.300	.640	.440	7.74	.937	7.25	525
14V1300101	1.300	.640	.440	7.74	.937	7.25	465
16V1300101	1.300	.640	.440	7.74	.937	7.25	900
17V1300101	1.300	.640	.440	7.74	.937	7.25	1125
20V1300101	1.300	.640	.440	7.74	.937	7.25	330

416-251-2831

PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01V1570001	1.570	.950	.560	10.05	1.13	11.30	140
05V1570001	1.570	.950	.560	10.05	1.13	11.30	115
08V1570001	1.570	.950	.560	10.05	1.13	11.30	56
12V1570001	1.570	.950	.560	10.05	1.13	11.30	420
14V1570001	1.570	.950	.560	10.05	1.13	11.30	435
16V1570001	1.570	.950	.560	10.05	1.13	11.30	830
17V1570001	1.570	.950	.560	10.05	1.13	11.30	975
20V1570001	1.570	.950	.560	10.05	1.13	11.30	315
01V1850001	1.850	.930	.720	11.09	2.14	23.70	240
05V1850001	1.850	.930	.720	11.09	2.14	23.70	195
08V1850001	1.850	.930	.720	11.09	2.14	23.70	96
12V1850001	1.850	.930	.720	11.09	2.14	23.70	720
14V1850001	1.850	.930	.720	11.09	2.14	23.70	700
16V1850001	1.850	.930	.720	11.09	2.14	23.70	1390
17V1850001	1.850	.930	.720	11.09	2.14	23.70	1640
20V1850001	1.850	.930	.720	11.09	2.14	23.70	510
01V2000001	2.000	1.250	.500	12.97	1.21	15.70	120
05V2000001	2.000	1.250	.500	12.97	1.21	15.70	100
08V2000001	2.000	1.250	.500	12.97	1.21	15.70	48
12V2000001	2.000	1.250	.500	12.97	1.21	15.70	425
14V2000001	2.000	1.250	.500	12.97	1.21	15.70	370
16V2000001	2.000	1.250	.500	12.97	1.21	15.70	760
17V2000001	2.000	1.250	.500	12.97	1.21	15.70	895
20V2000001	2.000	1.250	.500	12.97	1.21	15.70	280

PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01V2000002	2.000	1.250	1.000	12.97	2.42	31.40	218
05V2000002	2.000	1.250	1.000	12.97	2.42	31.40	185
08V2000002	2.000	1.250	1.000	12.97	2.42	31.40	94
12V2000002	2.000	1.250	1.000	12.97	2.42	31.40	820
14V2000002	2.000	1.250	1.000	12.97	2.42	31.40	770
16V2000002	2.000	1.250	1.000	12.97	2.42	31.40	1380
17V2000002	2.000	1.250	1.000	12.97	2.42	31.40	1550
20V2000002	2.000	1.250	1.000	12.97	2.42	31.40	515
01V3000001	3.000	1.900	.500	19.55	1.77	34.60	114
05V3000001	3.000	1.900	.500	19.55	1.77	34.60	97
08V3000001	3.000	1.900	.500	19.55	1.77	34.60	45
12V3000001	3.000	1.900	.500	19.55	1.77	34.60	376
14V3000001	3.000	1.900	.500	19.55	1.77	34.60	345
16V3000001	3.000	1.900	.500	19.55	1.77	34.60	685
17V3000001	3.000	1.900	.500	19.55	1.77	34.60	800
20V3000001	3.000	1.900	.500	19.55	1.77	34.60	250
01V3000003	3.000	1.900	.750	19.55	2.66	52.03	170
05V3000003	3.000	1.900	.750	19.55	2.66	52.03	145
08V3000003	3.000	1.900	.750	19.55	2.66	52.03	68
12V3000003	3.000	1.900	.750	19.55	2.66	52.03	599
14V3000003	3.000	1.900	.750	19.55	2.66	52.03	565
16V3000003	3.000	1.900	.750	19.55	2.66	52.03	1028
17V3000003	3.000	1.900	.750	19.55	2.66	52.03	1300
20V3000003	3.000	1.900	.750	19.55	2.66	52.03	375

416-251-2831

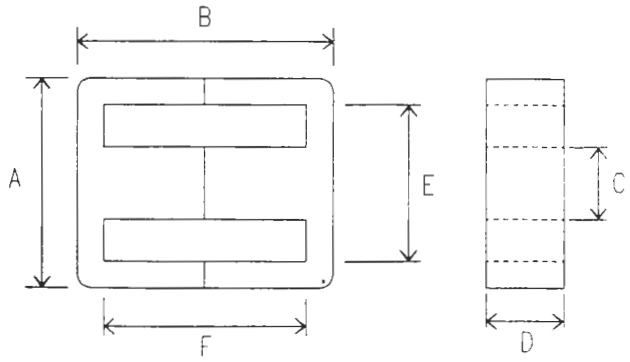
PART NUMBER	O.D. in.	I.D. in.	HT in.	le cm	Ae cm^2	Ve cm^3	AL uH/100t
01V3000002	3.000	1.900	1.000	19.55	3.55	69.30	228
05V3000002	3.000	1.900	1.000	19.55	3.55	69.30	193
08V3000002	3.000	1.900	1.000	19.55	3.55	69.30	91
12V3000002	3.000	1.900	1.000	19.55	3.55	69.30	750
14V3000002	3.000	1.900	1.000	19.55	3.55	69.30	690
16V3000002	3.000	1.900	1.000	19.55	3.55	69.30	1370
17V3000002	3.000	1.900	1.000	19.55	3.55	69.30	1600
20V3000002	3.000	1.900	1.000	19.55	3.55	69.30	500

MMG/NEOSID (CANADA) LIMITED
POWDERED IRON E-CORES

NEOSID ALSO OFFERS A LINE OF POWDERED IRON E CORES TO HELP REDUCE THE COSTS OF MANUFACTURING HIGHER STORAGE INDUCTORS AND MULTIPLE OUTPUT CHOKES.

NEOSID CAN SUPPLY BOBBINS FOR ALL OF OUR E CORES.

CORES ARE COLOUR CODED FOR MATERIAL IDENTIFICATION.



PART NUMBER	SIZE	A	B	C	D	E	F	le cm	Ae cm^2	Ve cm^3	AL µh/100T
01E375A312	EE375X5/16	1.375/35.0	1.125/28.5	.375/9.5	.312/8.0	1.00/25.4	.750/19.0	7.30	.760	5.35	260
12E375A312											510
14E375A312											480
16E375A312											880
17E375A312											1100
20E375A312											340
BOBBIN MP-MP00101											
01E375A375	EE375X375	1.375/35.0	1.125/28.5	.375/9.5	.375/9.5	1.00/25.4	.750/19.0	7.30	.907	6.35	320
12E375A375											670
14E375A375											635
16E375A375											1100
17E375A375											1300
20E375A375											505
BOBBIN PLA375X3/8											
01E475A590	EE42/15 mm	1.650/42.0	1.650/42.0	.475/12.0	.590/15.0	1.18/30.0	1.18/30.0	10.30	1.81	17.60	435
12E475A590											970
14E475A590											920
16E475A590											1580
17E475A590											1890
20E475A590											730
BOBBIN MP-FMP0140											
01E475A787	EE42/20 mm	1.650/42.0	1.650/42.0	.475/12.0	.787/20.0	1.18/30.0	1.18/30.0	10.30	2.40	23.30	550
12E475A787											1160
14E475A787											1100
16E475A787											1900
17E475A787											2250
20E475A787											850
BOBBIN MP-FMP0141											
01E680A820	EE55/21 mm	2.180/55.0	2.180/55.0	.680/17.3	.820/21.0	1.52/38.6	1.52/38.6	13.10	3.45	42.30	690
12E680A820											1430
14E680A820											1360
16E680A820											2330
17E680A820											2780
20E680A820											1070
BOBBIN MP-FMP0660											
01E680A985	EE55/25 mm	2.180/55.0	2.180/55.0	.680/17.3	.985/25.0	1.52/38.6	1.52/38.6	13.10	4.10	49.80	810
12E680A985											1640
14E680A985											1560
16E680A985											2670
17E680A985											3190
20E680A985											1220
BOBBIN MP-FMP0661											

416-251-2831

MMG/NEOSID (CANADA) LIMITED GENERAL CROSS REFERENCE GUI

NEOSID	COMPUTER #	MICROMETALS	ARNOLD
12E375A375	12E375A375	E137-8	
12E475A590	12E475A590	E168-8	
12E475A787	12E475A787	E168-8A	
12E680A820	12E680A820	E220-8	
14E375A375	14E375A375	E137-33	SG-1375-0514
14E680A820	14E680A820	E220-33	
16E375A375	16E375A375	E137-40	FR-1375-1200
16E680A820	16E680A820	E220-40	
17E375A312	17E375A312		
17E375A375	17E375A375	E137-26	FR-1375-7500
17E475A500	17E475A500		
17E475A590	17E475A590	E168-26	
17E475A787	17E475A787	E168-26A	
17E680A820	17E680A820	E220-26	
18E375A312	18E375A312		
18E375A375	18E375A375		
18E475A500	18E475A500		
18E475A590	18E475A590	E168-33	
18E475A787	18E475A787	E168-33A	
19E375A312	19E375A312		
19E375A375	19E375A375		
19E475A500	19E475A500		
19E475A590	19E475A590	E168-40	
19E475A787	19E475A787	E168-40A	
20E375A375	20E375A375	E137-28	
20E475A590	20E475A590	E168-28	
20E475A787	20E475A787	E168-28A	
20E680A820	20E680A820	E220-28	
N31T15BR270	16U0310001	T30-40	FE-0310-1201
N31T15GR325	17U0310001	T30-26	FE-0310-7501
N31T15OR140	12U0310001	T30-8/90	FE-0310-1801
N31T15RD043	01U0310001	T30-2	FE-0310-0201
N31T15RG016	08U0310001	T30-12	FE-0310-1401
N31T15YR036	05U0310001	T30-6	FE-0310-0501
N37T17BL175	18U0370001		
N37T17BR400	16U0370001	T38-40	
N37T17GR470	17U0370001	T38-26	
N37T17OR200	12U0370001	T38-8/90	
N37T17YW350	19U0370001		
N37T20BL100	18U0370002		FE-0380-0101
N37T20BR225	16U0370002	T37-40	FE-0380-1201
N37T20GR275	17U0370002	T37-26	FE-0380-7501
N37T20OR120	12U0370002	T37-8/90	FE-0380-1801
N37T20RD040	01U0370002	T37-2	FE-0380-0201
N37T20RG015	08U0370002	T37-12	FE-0380-1401

MMG/NEOSID (CANADA) LIMITED GENERAL CROSS REFERENCE GUIDE

NEOSID	COMPUTER #	MICROMETALS	ARNOLD
N37T20YR030	05U0370002	T37-6	FE-0380-0501
N37T20YW200	19U0370002		
N44T23BL125	18U0440001		FE-0437-01M1
N44T23BR300	16U0440001	T44-40	FE-0437-12M1
N44T23GR360	17U0440001	T44-26	FE-0437-75N1
N44T23OR180	12U0440001	T44-8/90	FE-0437-18M1
N44T23RD036	01U0440002	T44-2A	FE-0437-0201
N44T23RD052	01U0440001	T44-2	FE-0437-02M1
N44T23RG019	08U0440001	T44-12	FE-0437-14M1
N44T23YR042	05U0440001	T44-6	FE-0437-05M1
N44T23YW250	19U0440001		
N50T20BL275	18U0500003		
N50T20BR650	16U0500003	T51-40C	
N50T20GR800	17U0500003	T51-26C	
N50T20OR370	12U0500003	T51-8/90	
N50T20RD090	01U0500003		
N50T20RD138	01U0500005	T51-2B	
N50T20YR102	08U0500005	T51-6B	
N50T30BL125	18U0500001		FE-0500-0101
N50T30BL160	18U0500002		FE-0500-01M1
N50T30BR285	16U0500001	T50-40	FE-0500-1201
N50T30BR370	16U0500002	T50-40B	FE-0500-12M1
N50T30BR570	16U0500004	T50-40D	
N50T30GR320	17U0500001	T50-26	FE-0500-7501
N50T30GR420	17U0500002	T50-26B	FE-0500-75M1
N50T30GR700	17U0500004	T50-26D	
N50T30OR175	12U0500001	T50-8/90	FE-0500-1801
N50T30RD049	01U0500001	T50-2	FE-0500-0201
N50T30RG018	08U0500001	T50-12	FE-0500-1401
N50T30YR040	05U0500001	T50-6	FE-0500-0501
N50T30YW250	19U0500001		
N56T32BL125	18U0560001		
N56T32BL175	18U0560002		
N56T32GR340	17U0560001		
N56T32GR490	17U0560002		
N56T32YW250	19U0560001		
N56T32YW350	19U0560002		
N68T38BL140	18U0680001		FE-0680-01M1
N68T38BL180	18U0680002		FE-0680-0101
N68T38BR336	16U0680001	T68-40	FE-0680-12M1
N68T38BR450	16U0680002	T68-40A	FE-0680-1201
N68T38BR675	16U0680003	T68-40D	
N68T38GR420	17U0680001	T68-26	FE-0680-75M1
N68T38GR560	17U0680002	T68-26A	FE-0680-7501
N68T38GR840	17U0680003	T68-26D	

416-251-2831

MMG/NEOSID (CANADA) LIMITED GENERAL CROSS REFERENCE GUIC

NEOSID	COMPUTER #	MICROMETALS	ARNOLD
N68T38OR195	12U0680001	T68-8/90	FE-0680-18M1
N68T38RD057	01U0680001	T68-2	FE-0680-02M1
N68T38RD070	01U0680002	T60-2A	FE-0680-0201
N68T38RG021	08U0680001	T68-12	FE-0680-14M1
N68T38YR047	05U0680001	T68-6	FE-0680-05M1
N68T38YR062	05U0680002	T68-6A	FE-0680-0501
N68T38YW280	19U0680001		
N68T38YW360	19U0680002		
N82T51BL150	18U0820001		FE-0800-0101
N82T51BL300	18U0820001		
N82T51BR380	16U0820001	T80-40	FE-0800-1201
N82T51BR575	16U0820002	T80-40B	FE-0800-12M1
N82T51BR760	16U0820003	T80-40D	FE-2151-1201
N82T51GR450	17U0820001	T80-26	
N82T51GR700	17U0820002	T80-26B	FE-0800-75M1
N82T51GR900	17U0820003	T80-26D	FE-2151-7501
N82T51OR180	12U0820001	T80-8/90	FE-0800-1801
N82T51RD050	01U0820001	T80-2	FE-0800-0201
N82T51RD100	01U0820002		
N82T51RG022	08U0820001	T80-12	FE-0800-1401
N82T51YR045	05U0820001	T80-6	FE-0800-0501
N82T51YW300	19U0820001		
N82T51YW600	19U0820002		
N94T56BR473	16U0940001	T94-40	FE-0941-12M1
N94T56GR590	17U0940001	T94-26	FE-0941-75M1
N94T56OR248	12U0940001	T94-8/90	
N94T56RD084	01U0940001	T94-2	FE-0940-02M1
N94T56YR070	05U0940001	T94-6	FE-0940-05M1
N97T50BL310	18U0970001		
N97T50GR875	17U0970001		
N97T50YW620	19U0970001		
N106T57BL235	18V1060001		
N106T57BL335	18V1060002	T106-2B	FE-1060-0101
N106T57BL440	18V1060003		FE-1060-01M1
N106T57BR1030	16V1060003	T106-40B	FE-1060-12M1
N106T57BR560	16V1060001	T106-40A	
N106T57BR785	16V1060002	T106-40	FE-1060-1201
N106T57BY300	20V1060001	T106-28	
N106T57GR1200	17V1060003	T106-26B	FE-1060-75M1
N106T57GR650	17V1060001	T106-26A	
N106T57GR900	17V1060002	T106-26	FE-1060-7501
N106T57PU400	14V1060001	T106-33	
N106T57RD135	01V1060002	T106-2	FE-1060-0201
N106T57RD170	01V1060003		FE-1060-02M1
N106T57YR116	05V1060001	T106-6	FE-1060-0501
N106T57YW470	19V1060001		

MMG/NEOSID (CANADA) LIMITED GENERAL CROSS REFERENCE GUIDE

NEOSID	COMPUTER #	MICROMETALS	ARNOLD
N106T57YW670	19V1060002		
N106T57YW880	19V1060003		
N130T79BL270	18V1300001	T130-28	FE-1300-0101
N130T79BR665	16V1300001	T130-40	FE-1300-1201
N130T79BY250	20V1300001	T130-28	
N130T79GR785	17V1300001	T130-26	FE-1300-7501
N130T79OR350	12V1300001	T130-8/90	
N130T79PU335	14V1300001	T130-33	
N130T79RD110	01V1300001	T130-2	FE-1300-0201
N130T79YR096	05V1300001	T130-6	FE-1300-0501
N130T79YW540	19V1300001		
N157T95BL350	18V1570001	T157-28	FE-1570-0101
N157T95BR830	16V1570001	T157-40	FE-1570-1201
N157T95BY315	20V1570001	T157-28	
N157T95GR975	17V1570001	T157-26	FE-1570-7501
N157T95OR420	12V1570001	T157-8/90	
N157T95PU435	14V1570001	T157-33	
N157T95RD140	01V1570001	T157-2	FE-1570-0201
N157T95YR115	05V1570001	T157-6	FE-1570-0501
N157T95YW700	19V1570001		
N185T93BL615	18V1850001	T184-28	FE-1840-0101
N185T93BR1390	16V1850001	T184-40	FE-1840-1201
N185T93BY510	20V1850001	T184-28	
N185T93GR1640	17V1850001	T184-26	FE-1840-7501
N185T93OR720	12V1850001	T184-8/90	
N185T93PU700	14V1850001	T184-33	
N185T93RD240	01V1850001	T184-2	FE-1840-0201
N185T93YR195	05V1850001	T184-6	FE-1840-0501
N185T93YW1230	19V1850001		
N200T125BL300	18V2000001	T200-28	FE-2000-0101
N200T125BL600	18V2000002		
N200T125BR1380	16V2000002	T200-40B	
N200T125BR760	16V2000001	T200-40	FE-2000-1201
N200T125BY280	20V2000001	T200-28	
N200T125GR1550	17V2000002	T200-26B	
N200T125GR895	17V2000001	T200-26	FE-2000-7501
N200T125OR425	12V2000001	T200-8/90	
N200T125PU370	14V2000001	T200-33	
N200T125RD120	01V2000001	T200-2	FE-2000-0201
N200T125RD218	01V2000002	T200-2B	
N200T125YR100	05V2000001	T200-6	FE-2000-0501
N200T125YW1200	19V2000002		
N200T125YW600	19V2000001		
N300T190BL345	18V3000001	T300-33	FE-3000-0101
N300T190BL690	18V3000002	T300-33D	

416-251-2831

MMG/NEOSID (CANADA) LIMITED GENERAL CROSS REFERENCE GUIC

NEOSIOD	COMPUTER #	MICROMETALS	ARNOLD
N300T190BR1370	16V3000002	T300-40D	FE-2372-1201
N300T190BR685	16V3000001	T300-40	FE-3000-1201
N300T190GR1600	17V3000002	T300-26D	FE-2372-7501
N300T190GR800	17V3000001	T300-26	FE-3000-7501
N300T190RD114	01V3000001	T300-2	FE-3000-0201
N300T190RD228	01V3000002	T300-2D	
N300T190YW1200	19V3000002		
N300T190YW600	19V3000001		

*This corss reference is meant to be a guide to alternate parts. Neosid does not claim that any one part is identical to any other.

**Although every effort has been made to make sure that all of the information in this catalogue is correct, the Company cannot accept any libility for errors.

***The Company's policy is one of continious improvement and developmentand the right to change materials, designs, dimensions, and descriptions, at any time, without notice, is reserved.

Parameter	Symbol	Standard Conditions of Test	Unit	F19	F13	F14	F16	F25*	F29*	F302
Material Ordering Code			---	38	30	31	32	34	35	24
Initial Permeability	μ_i	B→0 25°C		1000 ±20%	650 ±20%	220 ±20%	125 ±20%	50 ±20%	12 ±20%	425 ±20%
Saturation Flux Density (typical)	B_{sat}	H = 796 A/m = 10 Oe 25°C	mT	280	320	350	340	---	---	350
Loss Factor (minimum)	$\frac{\tan\delta_{r+e}}{\mu_i}$	B→0 25°C 250 kHz	10^{-6}	---	50	---	---	---	---	50
		500 kHz		130	65	40	---	---	---	50
		1 MHz		350	130	42	60	50	---	160
		2 MHz		---	---	50	---	50	---	500
		3 MHz		---	---	---	---	55	---	---
		5 MHz		---	---	---	65	65	---	---
		10 MHz		---	---	---	100	75	100	---
		15 MHz		---	---	---	---	100	---	---
		20 MHz		---	---	---	---	125	---	---
		40 MHz		---	---	---	---	300	---	---
		100 MHz		---	---	---	---	---	200	---
		200 MHz		---	---	---	---	---	1000	---
Temperature Factor	$\frac{\Delta\mu}{\mu_i^2 \cdot \Delta T}$	B < 0.25 mT 10kHz +25°C to +55°C	10^{-6}/°C	3-6.5	1.5	12-30	20-50	10-15	50	5-15
Curie Temperature (minimum)	θ_c	B < 0.25 mT 10kHz	°C	120	180	270	270	450	500	200
Resistivity (typical)	ρ	1 V/cm 25°C	ohm-cm	10^6	3.10^4	10^6	10^6	10^6	10^6	10^6

* These are perminvar ferrites and undergo irreversible changes of characteristics (perm increases and loss factors become much greater, especially at higher frequencies) if subjected to strong magnetic fields or mechanical shocks.

COATINGS

The thermoset coatings we have developed for our powdered iron cores is also available for ferrites. For toroids over 3/8" O.D. this coating provides a smooth surface for winding, as well as a dielectric insulation of at least 500V. Beads, baluns, and small toroids cannot be coated by this process, for these parts we can offer Parylene coating.

TOLERANCES

MECHANICAL:

Dimensions under 1/8" ±0.005"
1/8" to under 1/4" ±0.010"
1/4" to under 1" ±0.020"
1" and over ±0.030"
Dimensions are nominal for uncoated cores.
Allow up to 0.005" for coating thickness

ELECTRICAL:

Electrical parameters are given for nominal dimension cores.
There is no corner radius correction.
All AL values are ±25%
All Z values are ±50%

Closer or different tolerences can be arranged.

THE NEOSID PART NUMBER

17 V 1060 002

- 002 — MINOR DIMENSION OR FACTORY SPECIFIED CODE
- 1060 — MAJOR DIMENSION
- V — CORE TYPE
- 17 — MATERIAL CODE

416-251-2831

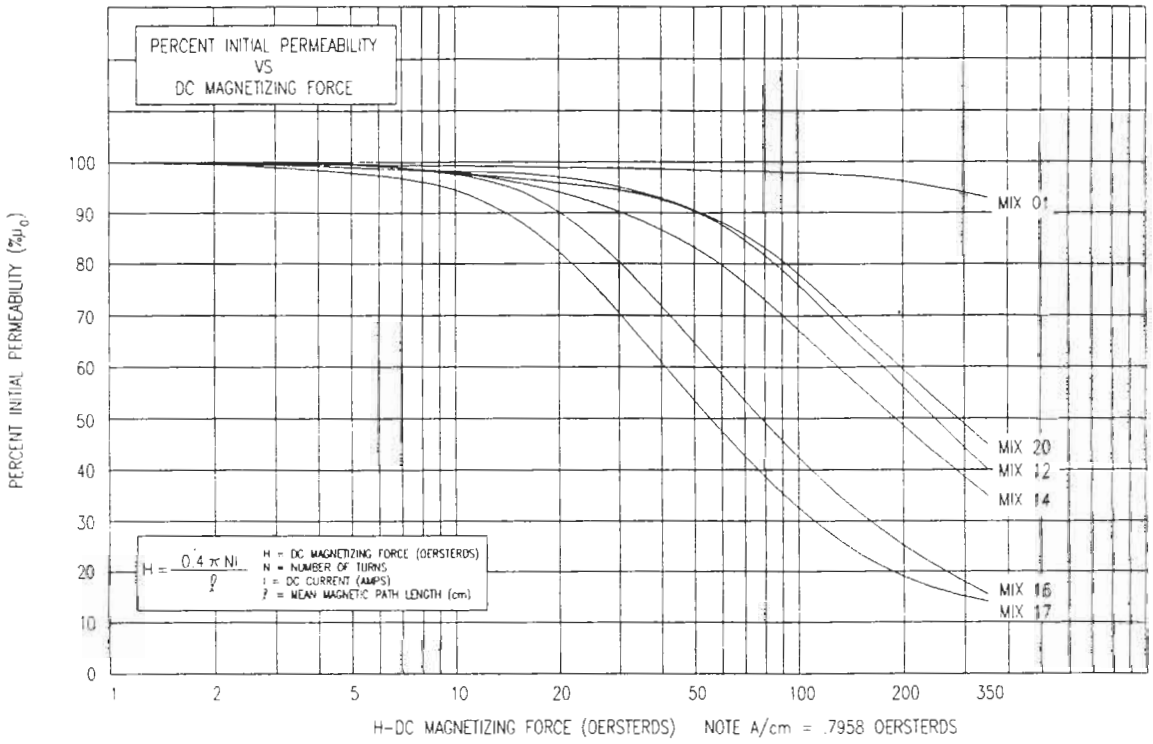
MMG/NEOSID IRON POWDER CORE MATERIALS TEMPERATURE STABILITY

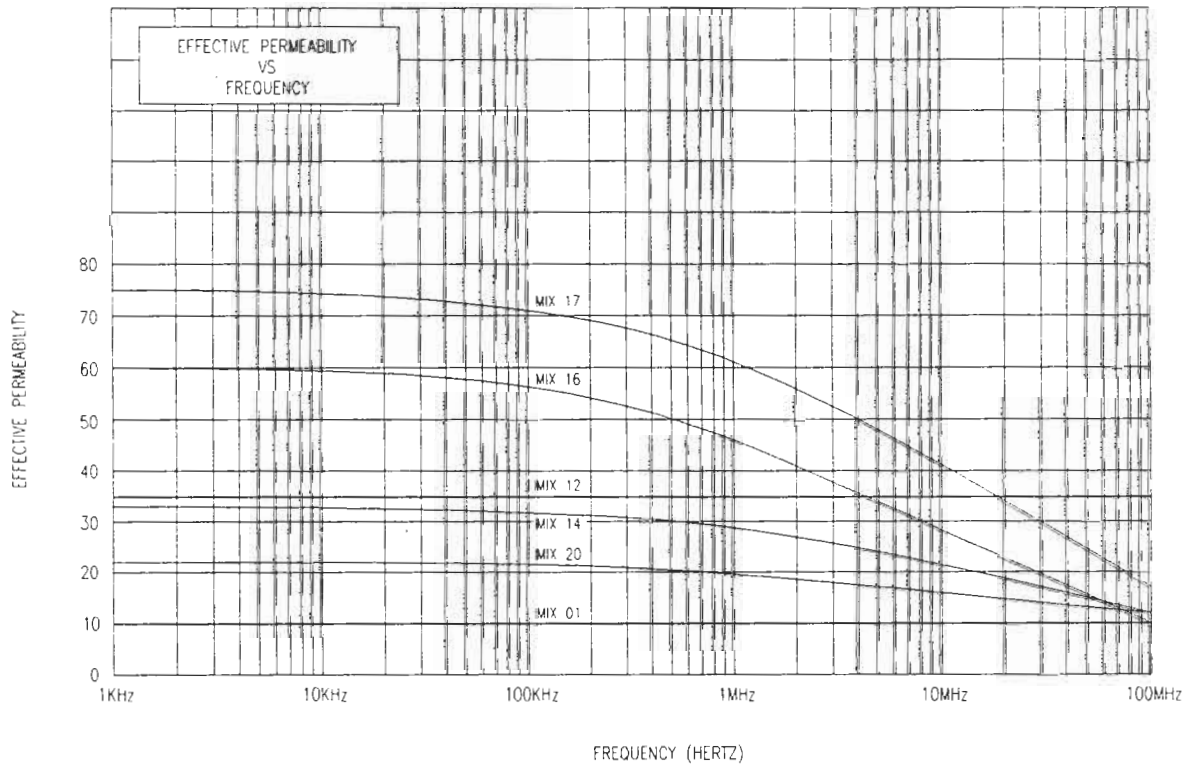
Temperature Stability of Neosid Iron Powder Core Materials

Material Code	Material Type	Permeability	Colour Code	Temp. Coefficient (ppm/ $^{\circ}$C)
01	Carb E	10	Red	+50
02	Carb TH	10	White	+45
05	Carb SF	8.5	Yellow/Red	+35
08	Synthetic Oxide	4	Green/Red	+450
12	Carb GQ4	35	Orange	+250
14	Mix - 14	33	Purple	+650
16	Mix - 16	60	Brown	+950
17	Mix -17	75	Green	+920
20	Mix - 20	22	Blue/Yellow	+450

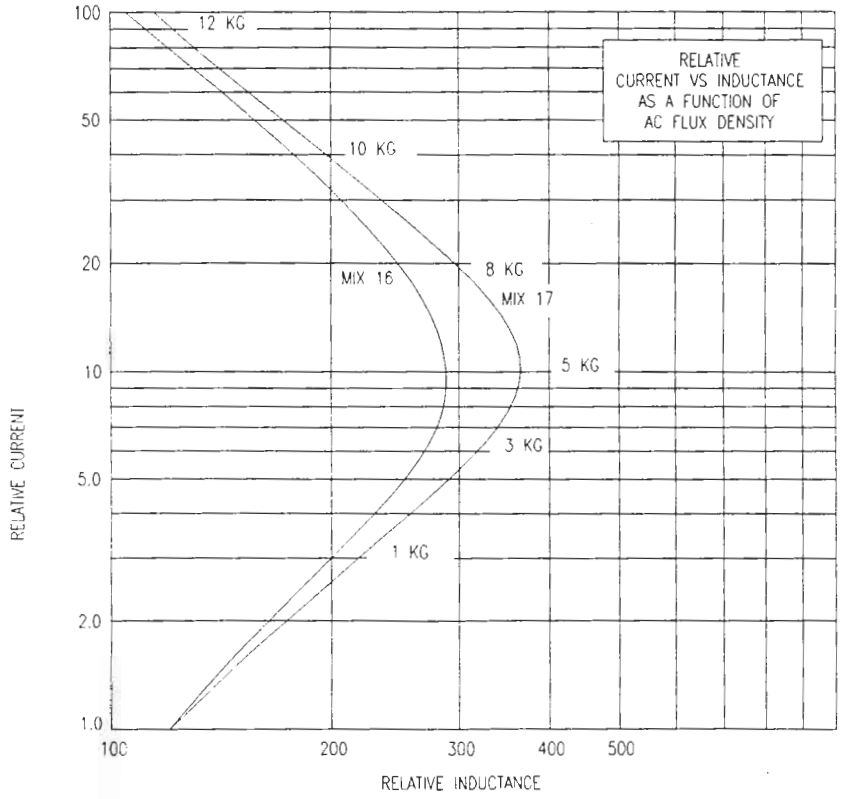
The values listed above are typical for a temperature range of -40 $^{\circ}$C to +80 $^{\circ}$C and may vary depending upon the core and coil configurations.

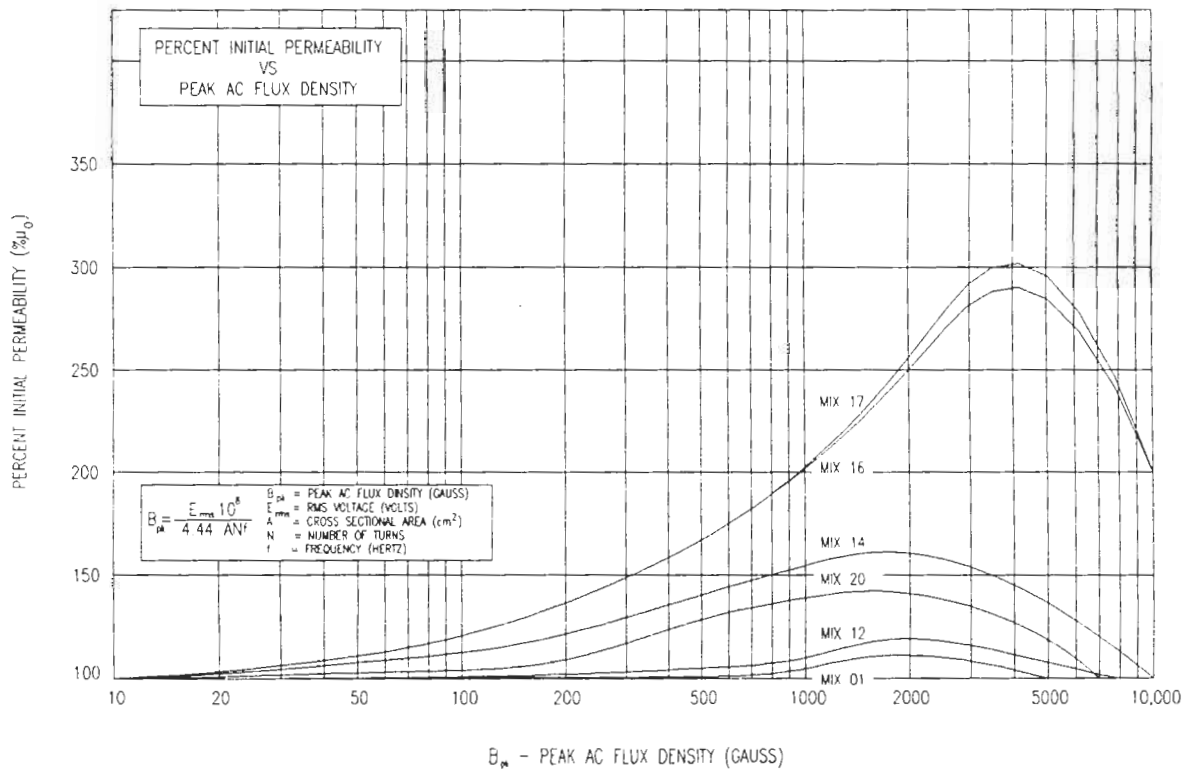
Iron powders are relatively stable with respect to temperature and exhibit a linear coefficient over the specified range.

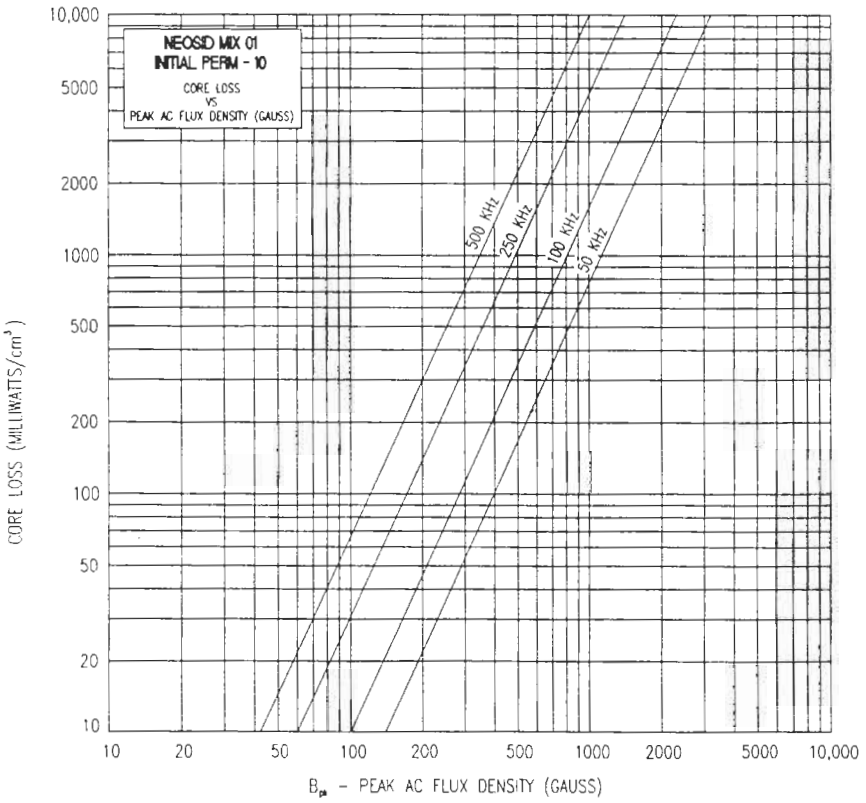

PERCENT INITIAL PERMEABILITY
VS
DC MAGNETIZING FORCE
PERCENT INITIAL PERMEABILITY (%μ0)
100
90
80
70
60
50
40
30
20
10
0
1
2
5
10
20
50
100
200
350
MIX 01
MIX 20
MIX 12
MIX 14
MIX 16
MIX 17
H = 0.4 π Ni / ℓ
H = DC MAGNETIZING FORCE (OERSTERDS)
N = NUMBER OF TURNS
i = DC CURRENT (AMPS)
ℓ = MEAN MAGNETIC PATH LENGTH (cm)
H-DC MAGNETIZING FORCE (OERSTERDS) NOTE A/cm = .7958 OERSTERDS

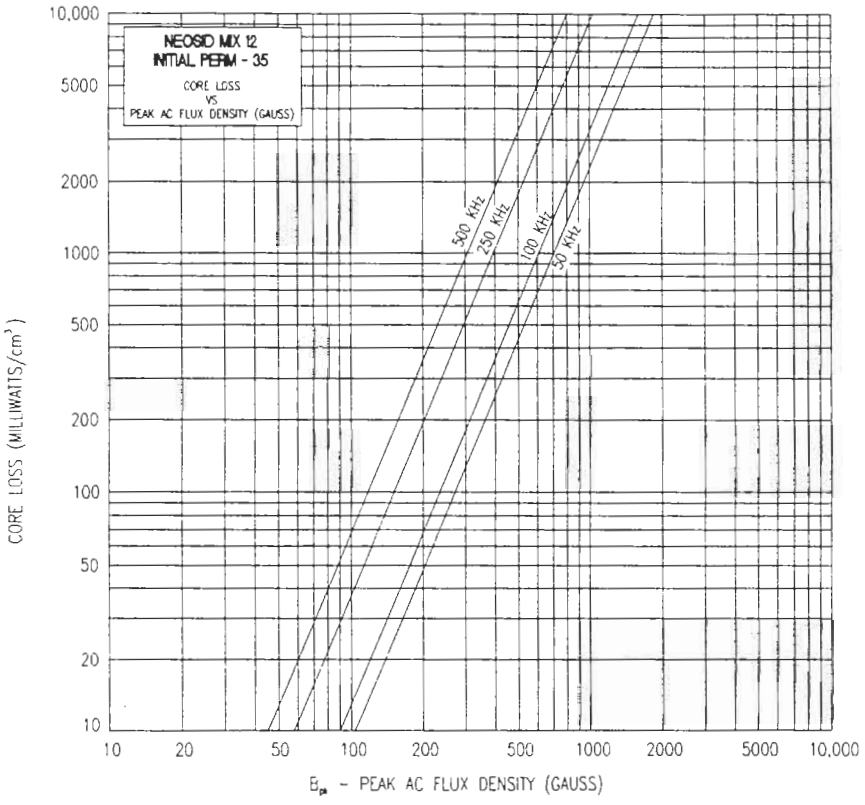

EFFECTIVE PERMEABILITY
VS
FREQUENCY
EFFECTIVE PERMEABILITY
80
70
60
50
40
30
20
10
0
MIX 17
MIX 16
MIX 12
MIX 14
MIX 20
MIX 01
1KHz
10KHz
100KHz
1MHz
10MHz
100MHz
FREQUENCY (HERTZ)

416-251-2831

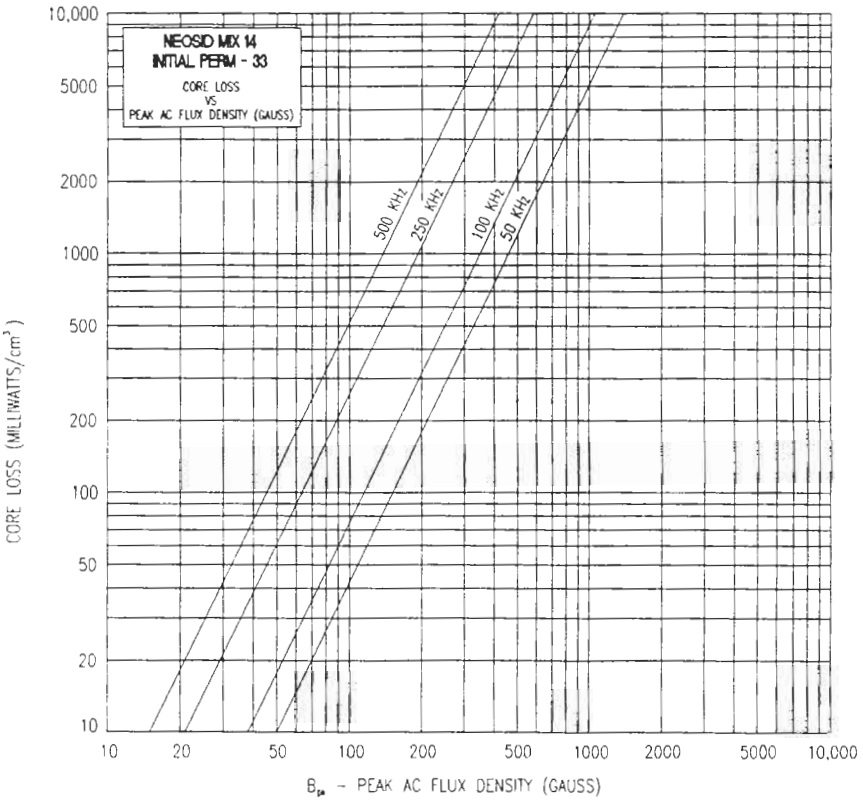

RELATIVE CURRENT VS INDUCTANCE AS A FUNCTION OF AC FLUX DENSITY
12 KG
10 KG
8 KG
MIX 17
MIX 16
5 KG
3 KG
1 KG
RELATIVE CURRENT
100
50
20
10
5.0
2.0
1.0
100
200
300
400
500
RELATIVE INDUCTANCE

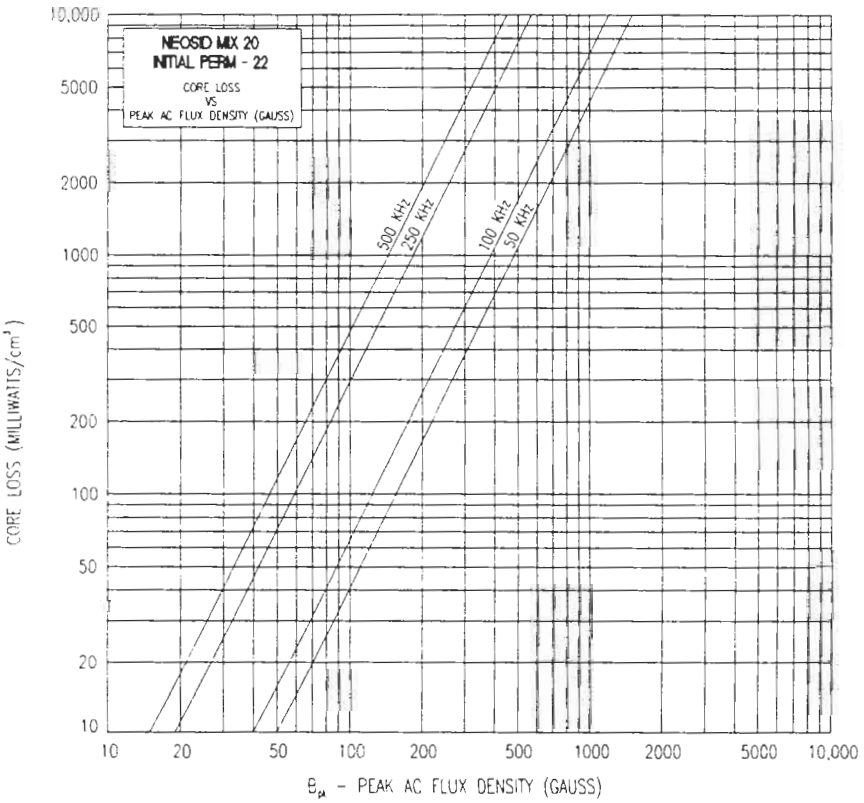

PERCENT INITIAL PERMEABILITY VS PEAK AC FLUX DENSITY
PERCENT INITIAL PERMEABILITY (%μ_0)
350
300
250
200
150
100
MIX 17
MIX 16
MIX 14
MIX 20
MIX 12
MIX 01
$B_{pk} = \frac{E_{rms} 10^8}{4.44 ANf}$
B_{pk} = PEAK AC FLUX DENSITY (GAUSS)
E_{rms} = RMS VOLTAGE (VOLTS)
A = CROSS SECTIONAL AREA (cm^2)
N = NUMBER OF TURNS
f = FREQUENCY (HERTZ)
10
20
50
100
200
500
1000
2000
5000
10,000
B_{pk} - PEAK AC FLUX DENSITY (GAUSS)

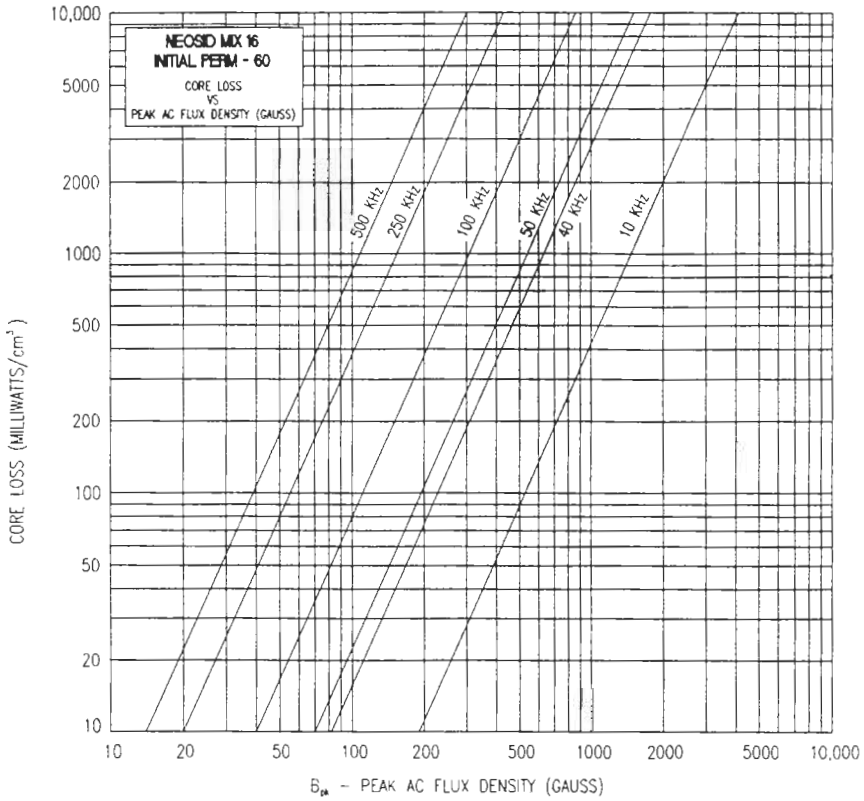

NEOSID MIX 01
INITIAL PERM - 10
CORE LOSS
VS
PEAK AC FLUX DENSITY (GAUSS)
500 KHz
250 KHz
100 KHz
50 KHz
CORE LOSS (MILLIWATTS/cm³)
10,000
5000
2000
1000
500
200
100
50
20
10
10
20
50
100
200
500
1000
2000
5000
10,000
B_pk - PEAK AC FLUX DENSITY (GAUSS)

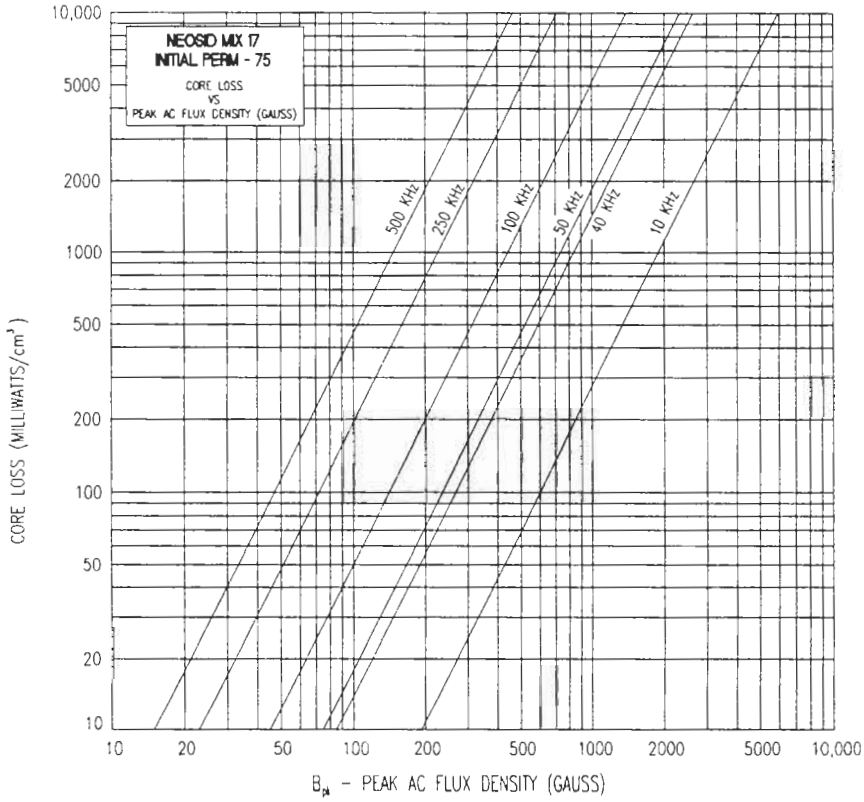

NEOSID MIX 12
INITIAL PERM - 35
CORE LOSS
VS
PEAK AC FLUX DENSITY (GAUSS)
500 KHz
250 KHz
100 KHz
50 KHz
CORE LOSS (MILLIWATTS/cm³)
10,000
5000
2000
1000
500
200
100
50
20
10
10
20
50
100
200
500
1000
2000
5000
10,000
B_pk - PEAK AC FLUX DENSITY (GAUSS)

416-251-2831


NEOSID MIX 14
INITIAL PERM - 33
CORE LOSS
VS
PEAK AC FLUX DENSITY (GAUSS)
500 KHz
250 KHz
100 KHz
50 KHz
CORE LOSS (MILLIWATTS/cm³)
10,000
5000
2000
1000
500
200
100
50
20
10
10
20
50
100
200
500
1000
2000
5000
10,000
Bμ - PEAK AC FLUX DENSITY (GAUSS)


NEOSID MIX 20
INITIAL PERM - 22
CORE LOSS
VS
PEAK AC FLUX DENSITY (GAUSS)
500 KHz
250 KHz
100 KHz
50 KHz
CORE LOSS (MILLIWATTS/cm³)
10,000
5000
2000
1000
500
200
100
50
20
10
10
20
50
100
200
500
1000
2000
5000
10,000
Bμ - PEAK AC FLUX DENSITY (GAUSS)


NEOSID MIX 16
INITIAL PERM - 60
CORE LOSS
VS
PEAK AC FLUX DENSITY (GAUSS)
500 KHz
250 KHz
100 KHz
50 KHz
40 KHz
10 KHz
CORE LOSS (MILLIWATTS/cm³)
10,000
5000
2000
1000
500
200
100
50
20
10
10
20
50
100
200
500
1000
2000
5000
10,000
Bpk - PEAK AC FLUX DENSITY (GAUSS)


NEOSID MIX 17
INITIAL PERM - 75
CORE LOSS
VS
PEAK AC FLUX DENSITY (GAUSS)
500 KHz
250 KHz
100 KHz
50 KHz
40 KHz
10 KHz
CORE LOSS (MILLIWATTS/cm³)
10,000
5000
2000
1000
500
200
100
50
20
10
10
20
50
100
200
500
1000
2000
5000
10,000
Bpk - PEAK AC FLUX DENSITY (GAUSS)

416-251-2831