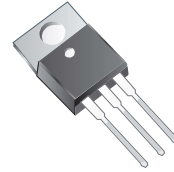


TIP42C



Epitaxial Planar Transistors PNP

RoHS Device
Halogen Free

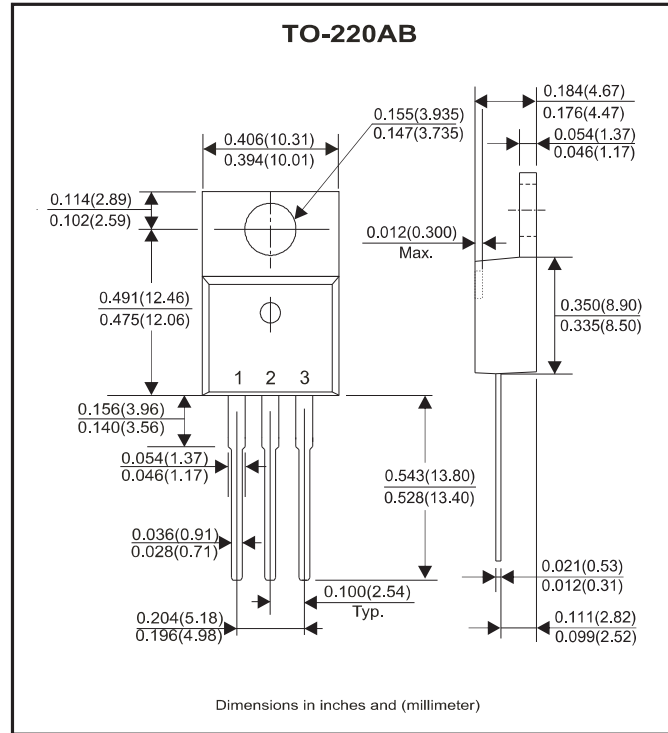
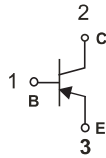


Features

- Low formed for surface mount application.
- Complementary to TIP41C.
- Straight Lead.

Diagram

1. BASE
2. COLLECTOR
3. EMITTER



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-base voltage	V _{CB0}	-100	V
Collector-emitter voltage	V _{CE0}	-100	V
Emitter-base voltage	V _{EB0}	-5	V
Collector current-continuous	I _C	-6	A
Collector power dissipation	P _C	2	W
Junction temperature	T _J	150	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Thermal Characteristics

Parameter	Symbol	Typ	Max	Unit
Thermal resistance junction-ambient	R _{θJA}		50	°C/W
Thermal resistance junction-case	R _{θJC}		3	°C/W

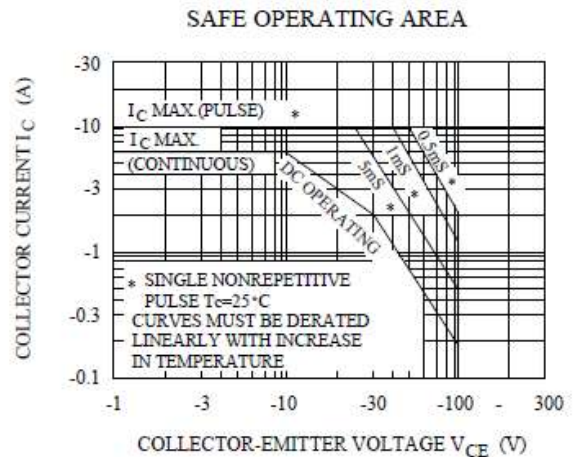
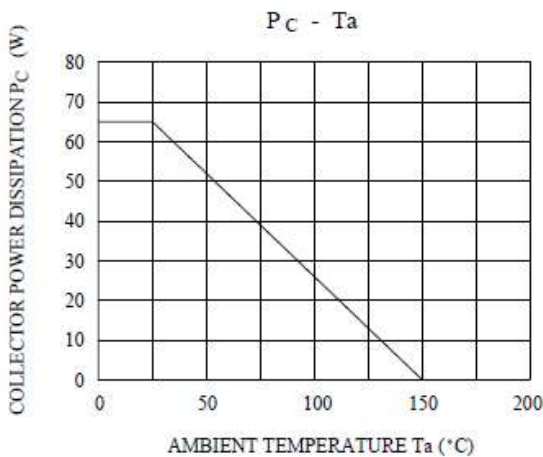
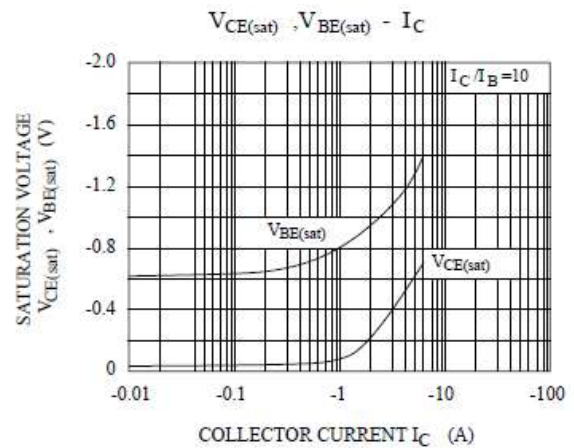
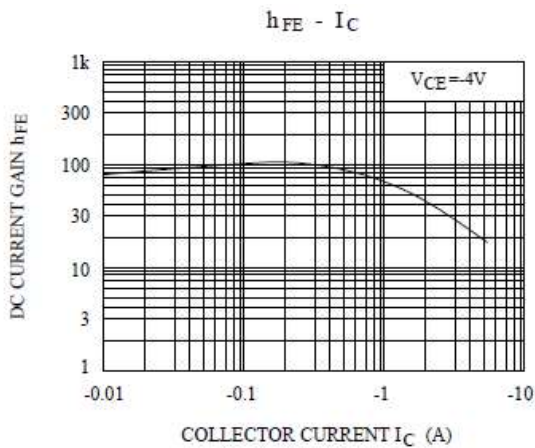
Company reserves the right to improve product design, functions and reliability without notice.

Rev:1.0

Electrical Characteristics (at TA=25°C unless otherwise noted)

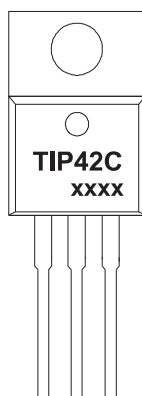
Parameter	Conditions	Symbol	Min	Max	Unit
Collector-base breakdown voltage	$I_C = -1\text{mA}$, $I_E = 0$	$V_{(BR)CBO}$	-100		V
Collector-emitter breakdown voltage	$I_C = -30\text{mA}$, $I_B = 0$	$V_{(BR)CEO}$	-100		V
Emitter-base breakdown voltage	$I_E = -1\text{mA}$, $I_C = 0$	$V_{(BR)EBO}$	-5		V
Collector cut-off current	$V_{CB} = -100\text{V}$, $I_E = 0$	I_{CES}		-0.4	mA
Collector cut-off current	$V_{CB} = -60\text{V}$, $I_E = 0$	I_{CBO}		-0.7	mA
Emitter cut-off current	$V_{EB} = -5\text{V}$, $I_C = 0$	I_{EBO}		-1	mA
DC current gain	$V_{CE} = -4\text{V}$, $I_C = -0.3\text{A}$	$h_{FE(1)*}$	30		
	$V_{CE} = -4\text{V}$, $I_C = -3\text{A}$	$h_{FE(2)*}$	15	75	
Collector-emitter saturation voltage	$I_C = -6\text{A}$, $I_B = -0.6\text{A}$	$V_{CE(sat)*}$		-1.5	V
Base-emitter voltage	$V_{CE} = -4\text{V}$, $I_C = -0.6\text{A}$	V_{BE}		-2	V
Transition frequency	$V_{CE} = -10\text{V}$, $I_C = -0.5\text{A}$	f_T	3		MHZ

Rating and Characteristics Curves



Marking Code

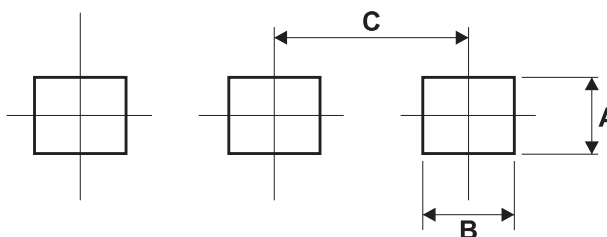
Part Number	Marking Code
TIP42C	TIP42C xxxx



TIP42C: Marking Code
xxxx: Control Code

Suggested PAD Layout

SIZE	TO-220AB	
	(mm)	(inch)
A	1.00	0.039
B	1.20	0.047
C	2.54	0.100



Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	Inner BOX (pcs)
TO-220AB	50	1,000