



Micro Commercial Components



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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

BAT54WX

Features

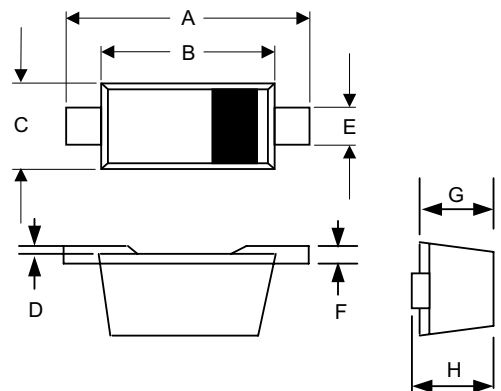
- Extremely-Fast Switching Speed
- Low Forward Voltage Drop
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking Code: JV
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

200mWatt, 30Volt Schottky Diodes

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	30	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
I_F	Forward Current	200	mA
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	635	$^{\circ}C/W$
P_D	Power dissipation	200	mW
T_J	Junction Temperature	-65 to +150	$^{\circ}C$
T_{STG}	Storage Temperature	-65 to +150	$^{\circ}C$
I_{FRM}	Repetitive peak forward current	300	mA
I_{FSM}	Peak forward current (9t=1us)	600	mA

SOD-523

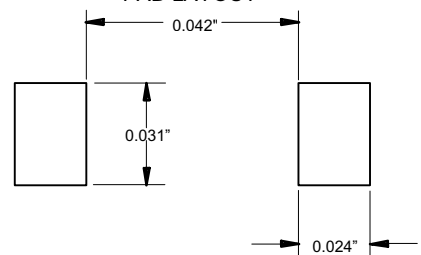


Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	30V		$I_R=10 \mu A$
I_R	Reverse Voltage Leakage Current		2 μA	$V_R=25V$
V_F	Forward Voltage		0.24V 0.50V 0.80V 0.32V 0.40V	$I_F=0.1mA$ $I_F=30mA$ $I_F=100mA$ $I_F=1.0mA$ $I_F=10mA$
C_T	Total Capacitance		10pF	$V_R=1V, f=1MHZ$
t_{rr}	Reverse Recovery Time		5ns	$I_{FR}=10mA, I_R=10mA \sim 1mA$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.059	.067	1.50	1.70	
B	.043	.051	1.10	1.30	
C	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
E	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	
G	.020	.028	0.50	0.70	
H	.020	.031	0.51	0.77	

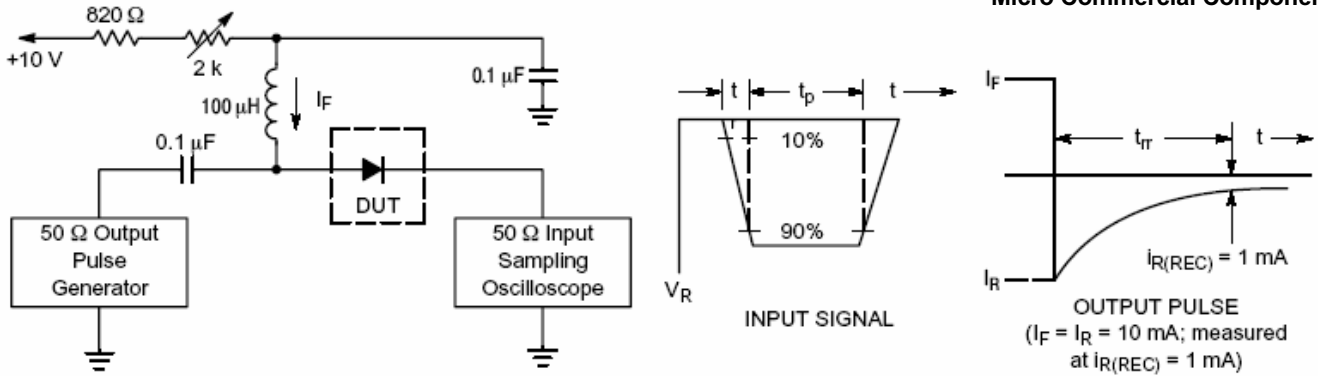
SUGGESTED SOLDER PAD LAYOUT



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- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
 2. Input pulse is adjusted so $I_{R(\text{peak})}$ is equal to 10 mA.
 3. $t_p \gg t_{tr}$

Figure 1. Recovery Time Equivalent Test Circuit

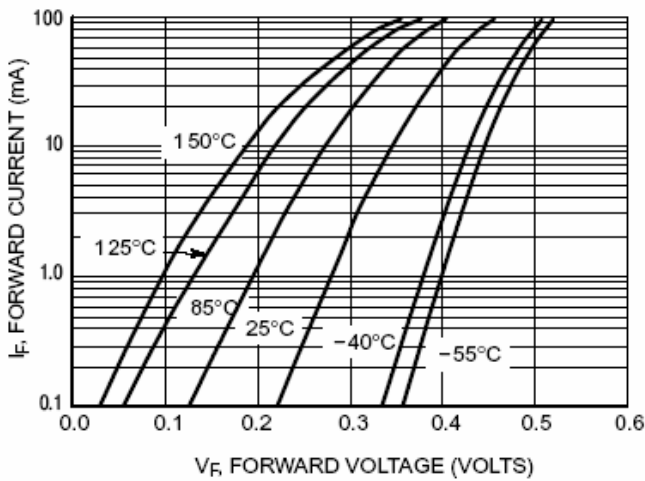


Figure 2. Forward Voltage

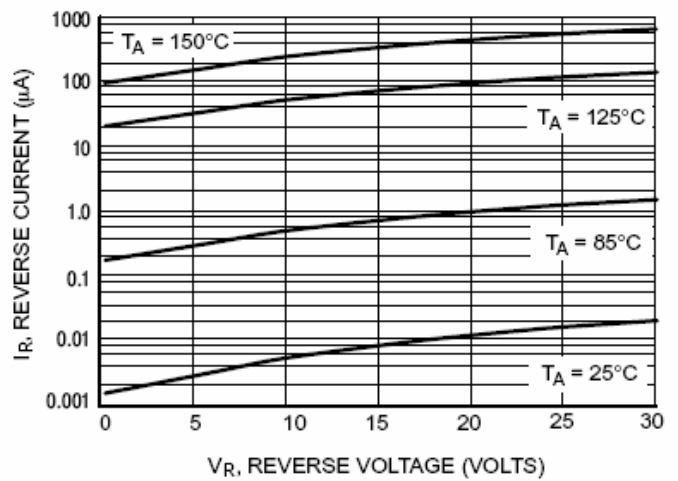


Figure 3. Leakage Current

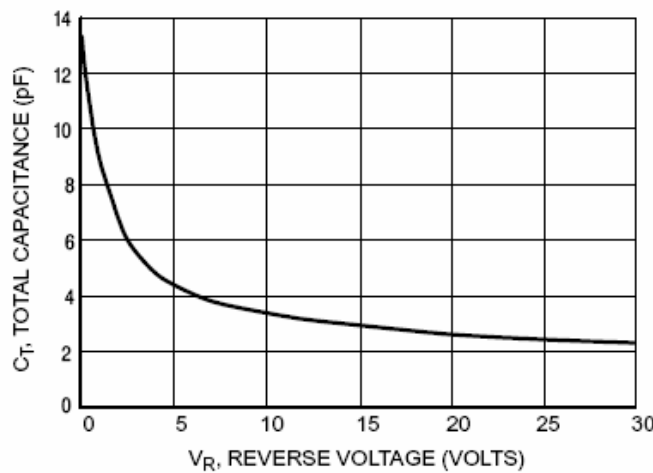


Figure 4. Total Capacitance



TM

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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