

M·C·C

Micro Commercial Components



Micro Commercial Components
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BAT54WX

Features

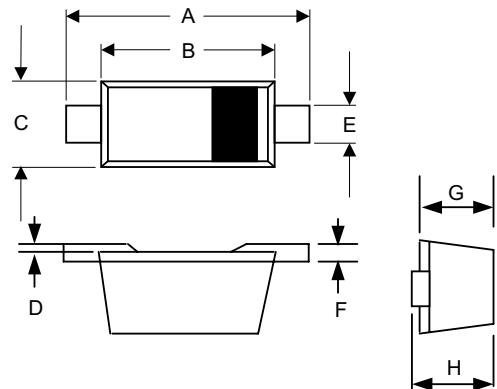
- Extremely-Fast Switching Speed
- Low Forward Voltage Drop
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking Code: JV
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

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

**200mWatt, 30Volt
Schottky Diodes**

SOD-523

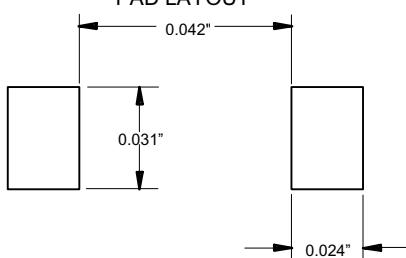


Electrical Characteristics @ 25°C Unless Otherwise Specified

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

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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	

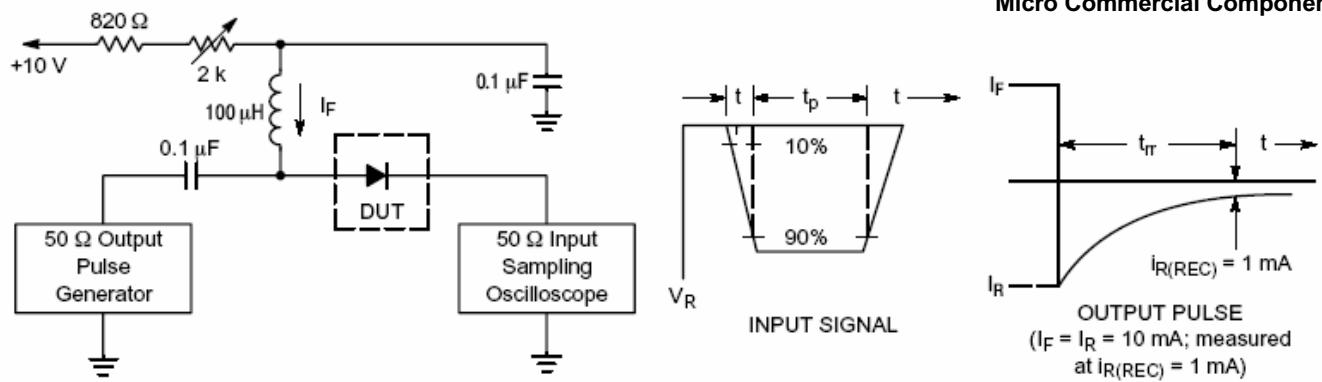
SUGGESTED SOLDER PAD LAYOUT



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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. $t_p \gg t_r$

Figure 1. Recovery Time Equivalent Test Circuit

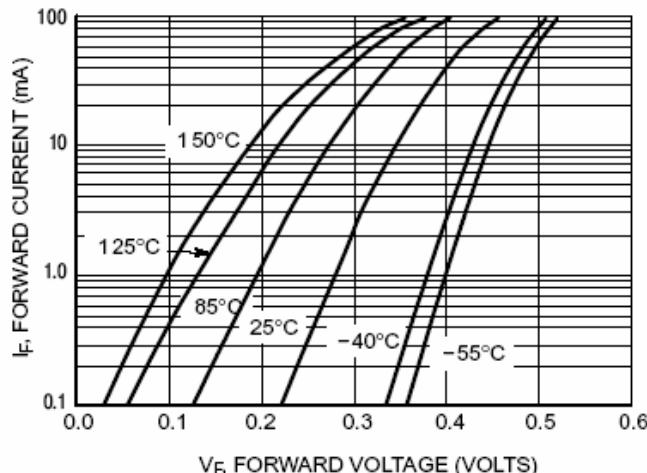


Figure 2. Forward Voltage

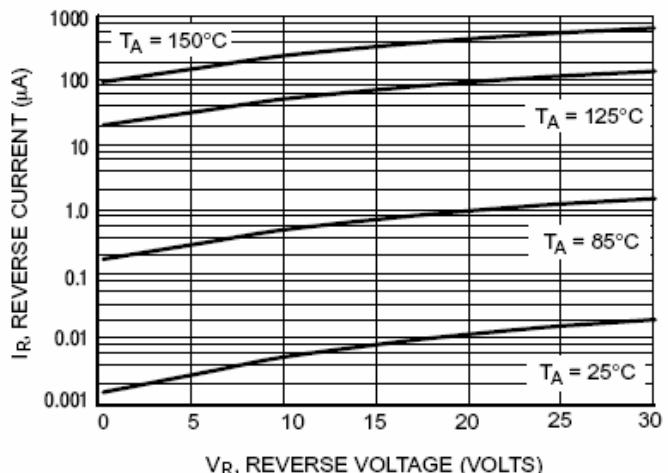


Figure 3. Leakage Current

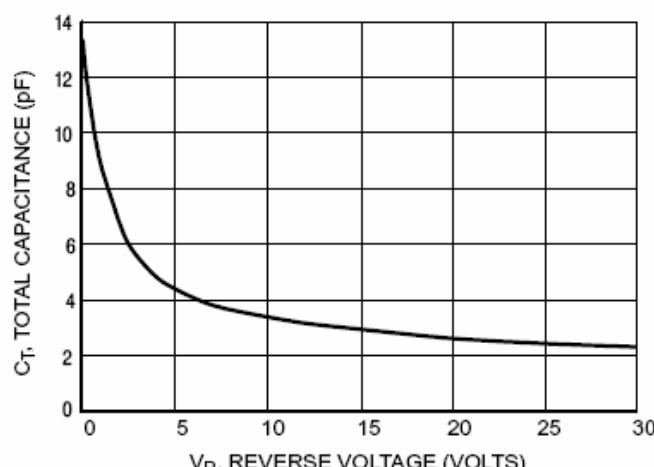


Figure 4. Total Capacitance

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Ordering Information :

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

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