



Micro Commercial Components

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BAT54WX

Features

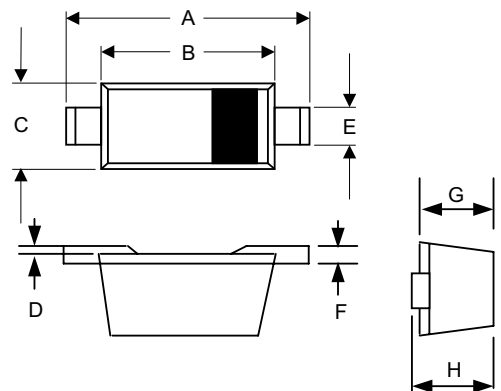
- Extremely-Fast Switching Speed
- Low Forward Voltage Drop
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking Code: JV
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)

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	$I_F=0.1mA$
			0.50V	$I_F=30mA$
			0.80V	$I_F=100mA$
			0.32V	$I_F=1.0mA$
	0.40V		$I_F=10mA$	
C_T	Total Capacitance		10pF	$V_R=1V, f=1MHz$
t_{rr}	Reverse Recovery Time		5ns	$I_F=10mA, I_R=10mA \sim 1mA$

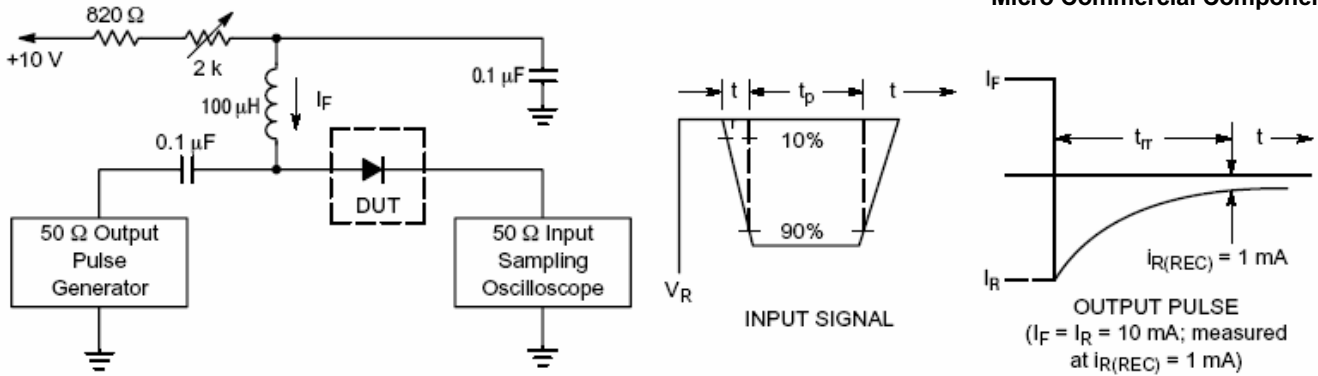
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.043	.051	1.10	1.30	
C	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
E	.010	.014	0.25	0.35	
F	.003	.003	0.08	0.15	
G	.020	.028	0.50	0.70	
H	.020	.031	0.51	0.78	

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

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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

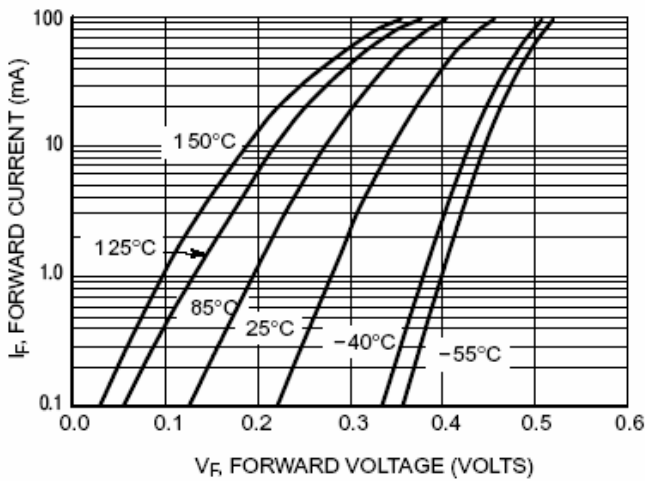


Figure 2. Forward Voltage

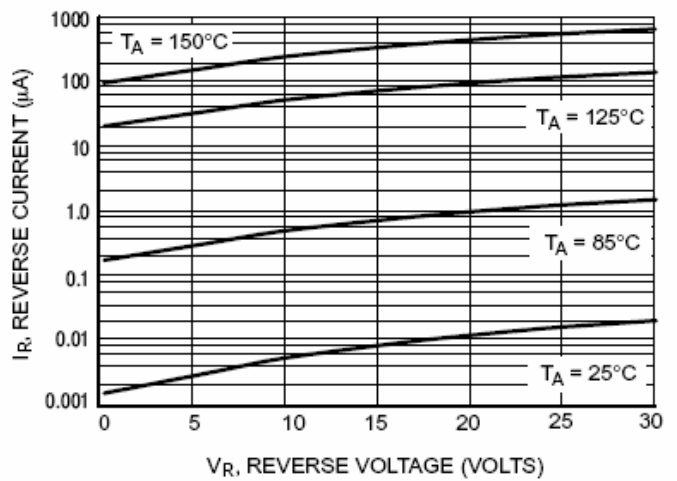


Figure 3. Leakage Current

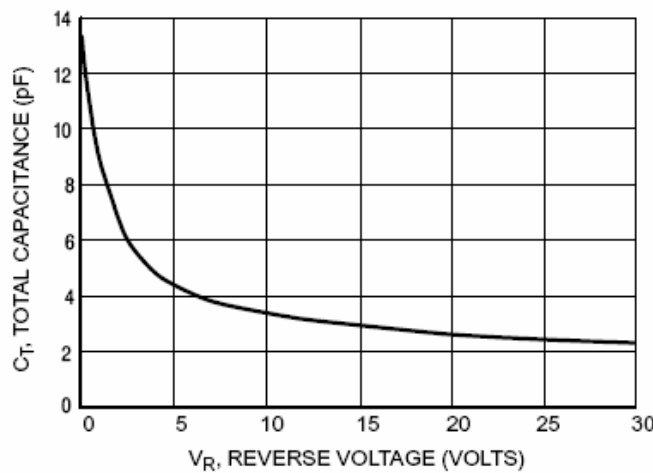


Figure 4. Total Capacitance



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Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

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