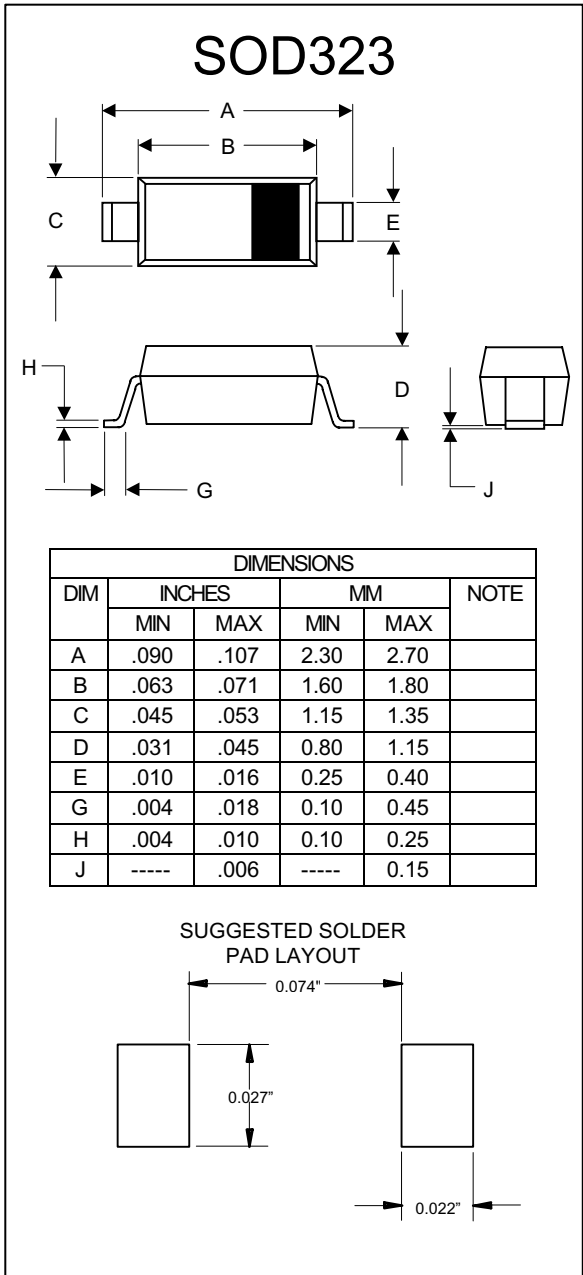




BAT46WS

Schottky Barrier Diode 200mW



Features

- Halogen free available upon request by adding suffix "-HF"
- High breakdown voltage
- Low turn-on voltage
- Guard ring construction for transient protection

Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Polarity: Indicated by Cathode Band
- Marking: S9
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings @ 25°C Unless Otherwise Specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	100	V
Forward Continuous Current	I_F	150	mA
Repetitive peak Forward Current (Note 1) @ $t_p < 1.0s$, Duty Cycle $< 50\%$	I_{FRM}	350	mA
Non-repetitive Peak Forward surge current @ $t = 8.3ms$	I_{FSM}	750	mA
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient Air	R_{thja}	500	K/W
Junction temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

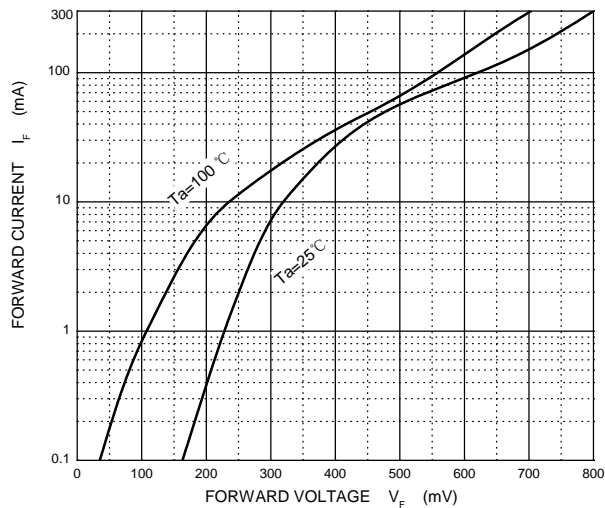
Electrical Characteristics @ 25°C Unless Otherwise Specified

Charateristic	Symbol	Min	Typ	Max	Unit	Test Cond.
Forward Voltage Drop(Note2)	V_F			0.25 0.45 1	V	$I_F=0.1mA$ $I_F=10mA$ $I_F=250mA$
Reverse voltage leakage current	I_R			0.3 0.5 1 2	μA	$V_R=1.5V$ $V_R=10V$ $V_R=50V$ $V_R=75V$
Reverse breakdown voltage(Note 2)	V_R	100			V	$I_R=100\mu A$
Diode capacitance	C_T		20 12		pF	$V_R=0V, f=1.0MHz$ $V_R=1V, f=1.0MHz$

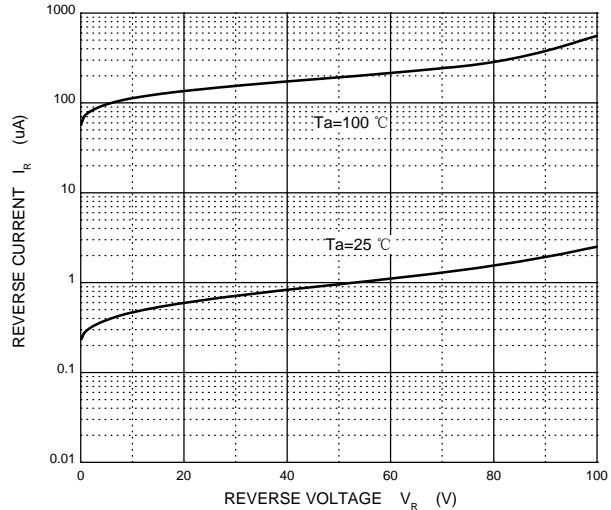
Notes: 1. Part mounted on FR-4 board with recommended pad layout.
 2. Short duration pulse test used to minimize self-heating effect.

RATINGS AND CHARACTERISTIC CURVES

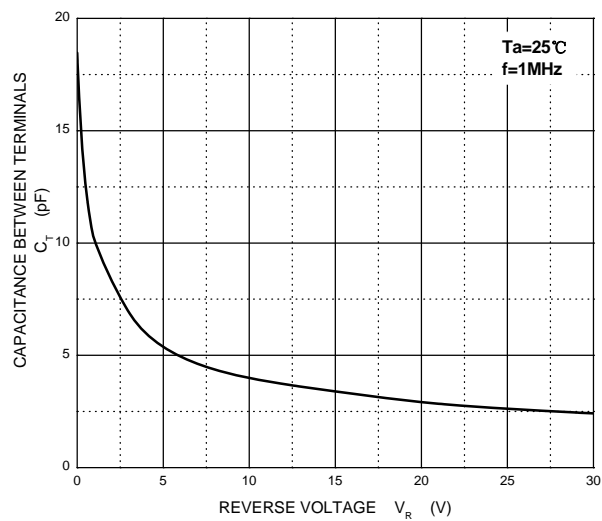
Forward Characteristics



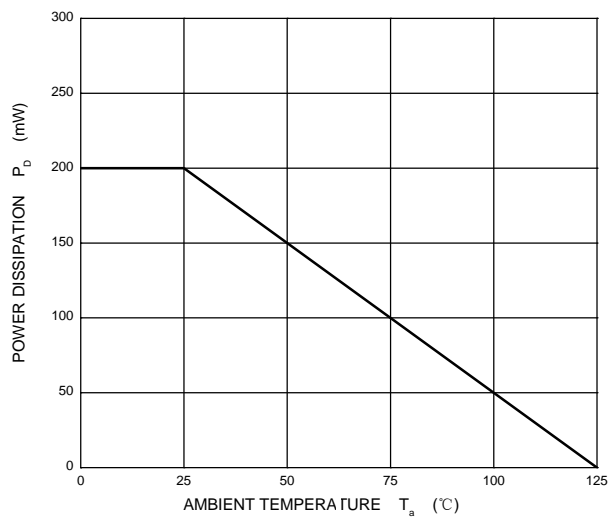
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve





Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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

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