BAT42W / BAT43W

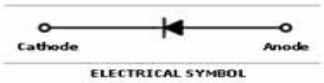
Reverse Voltage - 30 Volts

P ower - 400mW

400mW SOD-123 SURFACE MOUNT

400mW SOD-123 SURFACE MOUNT Small Outline Flat Lead Plastic Package Fast Switching Schottky Barrier Diode

SOD-123 Flat Lead



ELECTRICAL SYMBOL

Specification Features:

- Low Forward Voltage Drop
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

DEVICE MARKING CODE:

Device Type	Device Marking
BAT42W	C1
BAT43W	C2

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	400	mW
T_{STG}	Storage Temperature Range	-65 to +125	°C
T_J	Operating Junction Temperature	+125	°C
V_{RRM}	Repetitive Peak Reverse Voltage	30	V
V_R	Maximum DC Blocking Voltage	30	V
$I_{F(AV)}$	Average Forward Rectified Current	200	mA
I_{FSM}	Peak Forward Surge Current	4	A

These ratings are limiting values above which the serviceability of the diode may be impaired.

Electrical Characteristics TA = 25°C unless otherwise noted

Symbol	Parameter		Test Condition	Limits Min	Limits Max	Unit
B_V	Breakdown Voltage		I_R=100μA	30		Volts
I_R	Reverse Leakage Current		V_R=25V		500	nA
V_F	Forward Voltage	BAT42W	I_F=10mA		0.40	Volts
			I_F=50mA		0.65	
		BAT43W	I_F=2mA	0.26	0.33	
			I_F=15mA		0.45	
		BAT42W, BAT43W	I_F=200mA		1.0	
T_{RR}	Reverse Recovery Time		I_F=I_R=10mA, R_L=100Ω, I_{RR}=1mA	5 (Typical)		nS
C	Capacitance		V_R=1V, f=1M_{HZ}	7 (Typical)		pF

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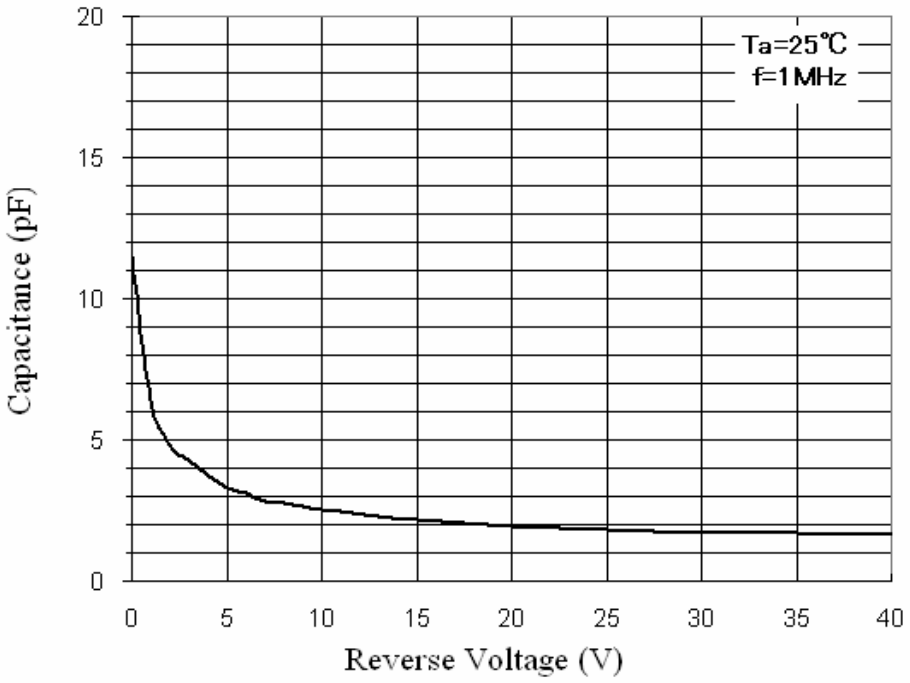
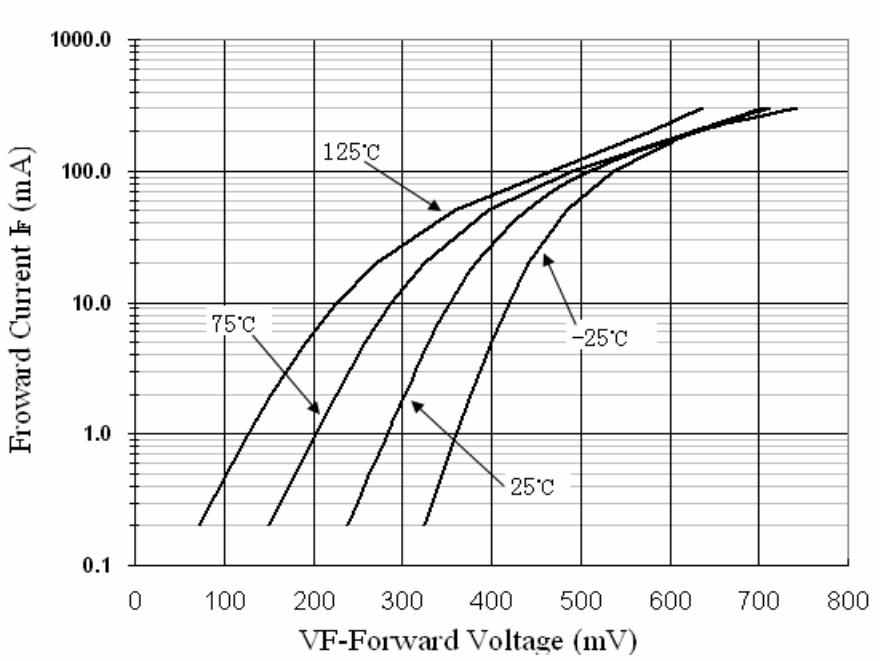
400mW SOD-123 SURFACE MOUNT

Typical Performance Characteristics

Total Capacitance

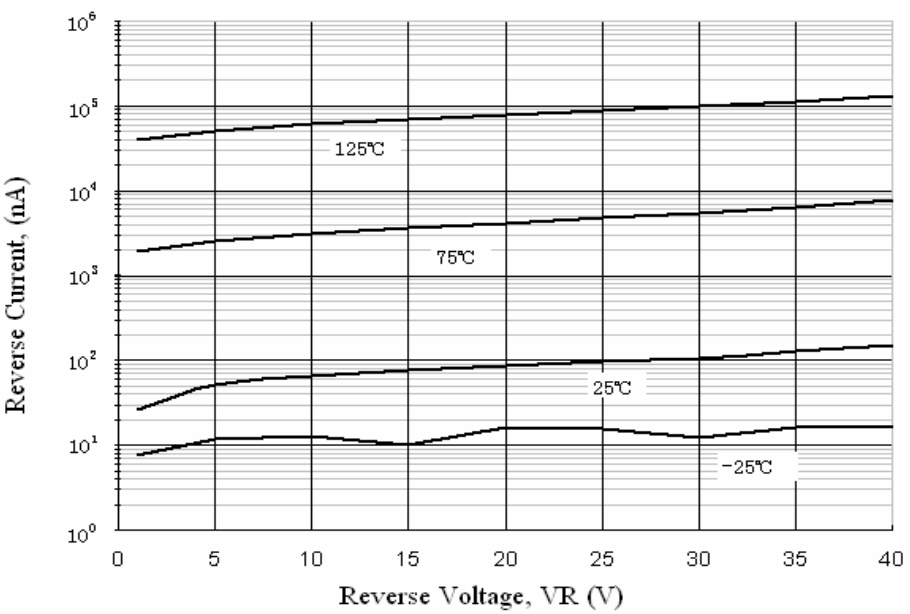


Forward Voltage vs Ambient Temperature

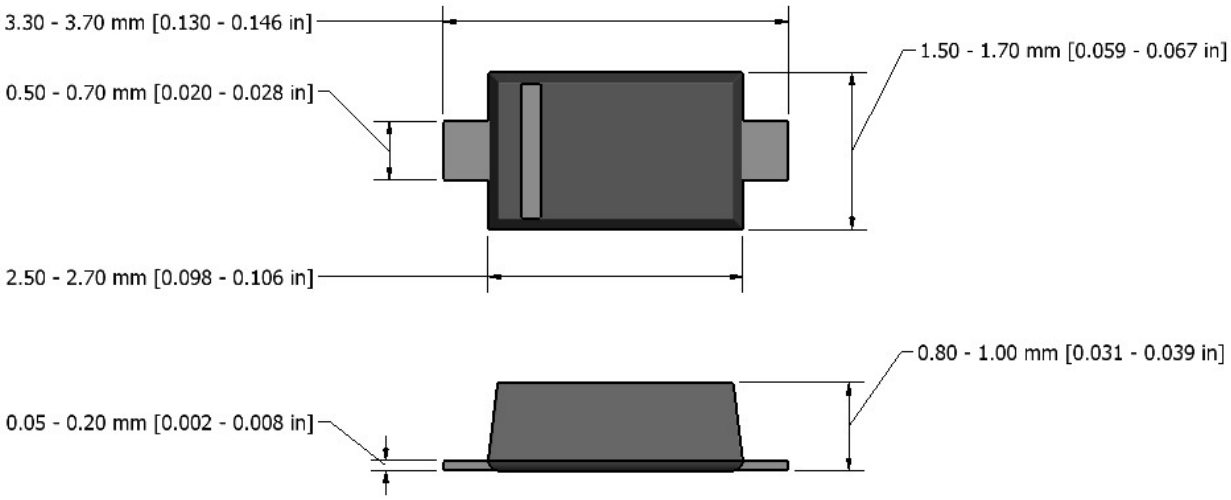


400mW SOD-123 SURFACE MOUNT

Reverse Current vs Reverse Voltage Reverse



SOD-123 Package Outline



NOTE: The above package outline is similar to JEITA SC-90.

This datasheet presents technical data of Schottky Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application.

Although information in this datasheet has been carefully checked, no responsibility for the inaccuracies can be assumed Please consult your nearest sales office for further assistance.

MIC reserves the right to make changes without further notice to any products herein to further improve reliability, function or design, cost and productivity.