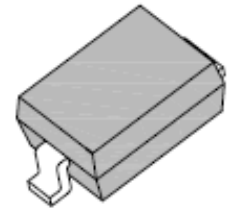


Two Terminals Schottky Barrier Diodes

Features

- Low turn-on voltage
- Low leakage current
- Integrated protection ring against static discharge
- For general purpose applications
- The low forward voltage drop and fast switching make it ideal for protected of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications
- RoHS compliant



SOD-123

Applications

- HF-Detector
- Protection Circuit
- Small Battery Charger
- Power Supplies
- DC/DC Converter for Notebooks
- Diode for Low Currents Wits a Low Supply Voltage



Mechanical Data

Case:	SOD-123, Plastic
Terminals:	Solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes the cathode end
Weight:	0.01 grams

Two Terminals Schottky Barrier Diodes

BAT42W/43W

Maximum Ratings *(T_{Ambient}=25°C unless noted otherwise)*

Symbol	Description	BAT42W	BAT43W	Unit	Conditions
	Marking	L2	L3		
VRRM	Peak Repetitive Reverse Voltage	30		V	
VRRS	RMS Reverse Voltage	21		V	
VDC	Max. DC Blocking Voltage	30		V	
IF(AV)	Max. Average Rectified Current	0.2		A	Ta=25 °C
IFSM	Peak Forward Surge Current	4		A	At 1.0 ms single half sine-wave superimposed on rated load(JEDEC method)
RthJA	Typical Thermal Resistance	635		°C /W	
TJ	Junction Temperature	125		°C	
TSTG	Storage Temperature Range	-55 to +125		°C	

Electrical Characteristics *(T_{Ambient}=25°C unless noted otherwise)*

Symbol	Description	BAT42W	BAT43W	Unit	Conditions
VF	Max. Forward Voltage	-	0.33	V	IF=2mA
		0.4	-		IF=10mA
		1.0			IF=200mA
IR	Max. DC Reverse Current	0.5		uA	at Rated DC Blocking Voltage
CJ	Typical Junction Temperature	10		pF	VR=0V, f=1MHz

Two Terminals Schottky Barrier Diodes

BAT42W/43W

Typical Characteristics Curves

Fig.1- Typical I_F vs. V_F

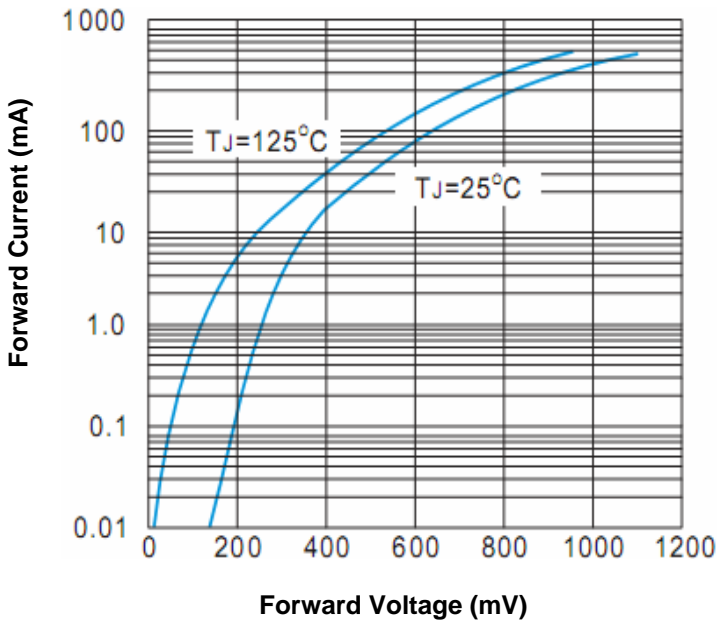


Fig.2- Typical $I_{F(AV)}$ vs. T_a

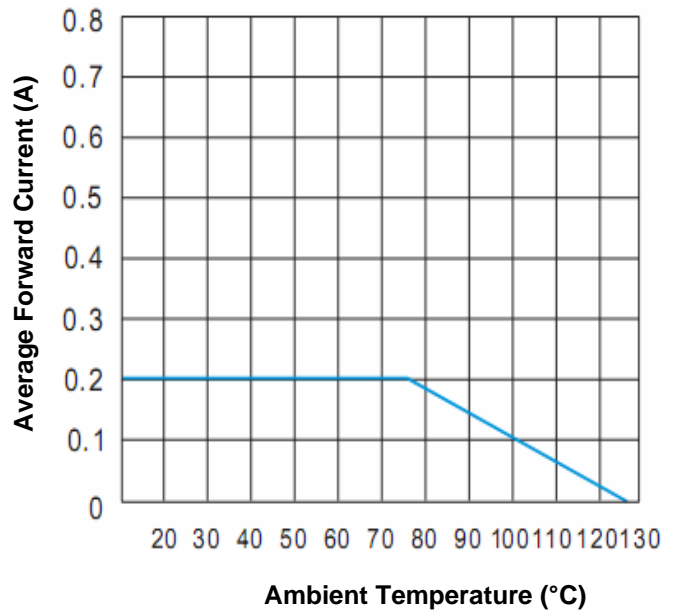


Fig.3- Typical I_R vs. V_R

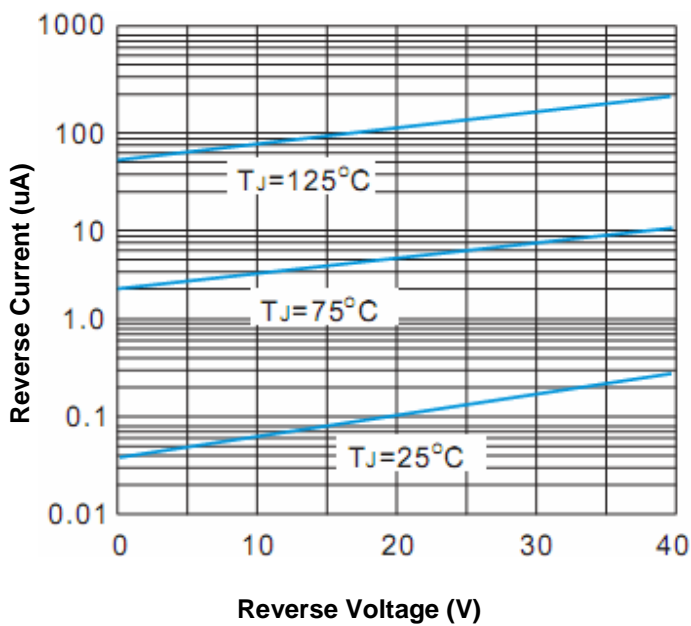
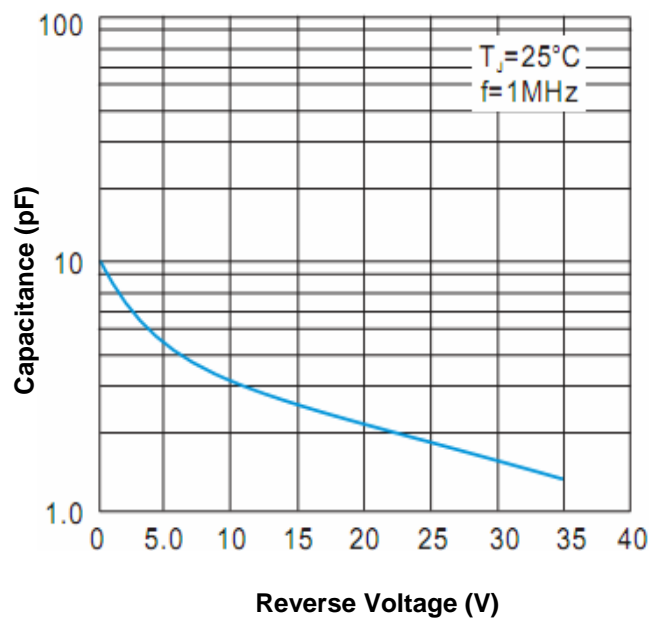


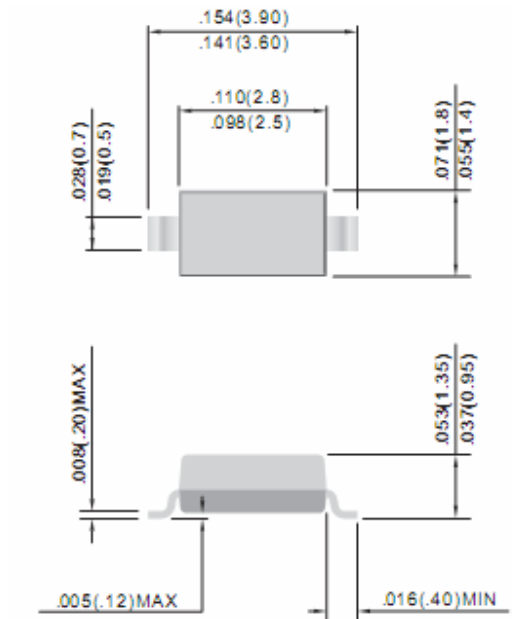
Fig.4- Typical C_J vs. V_R



Two Terminals Schottky Barrier Diodes

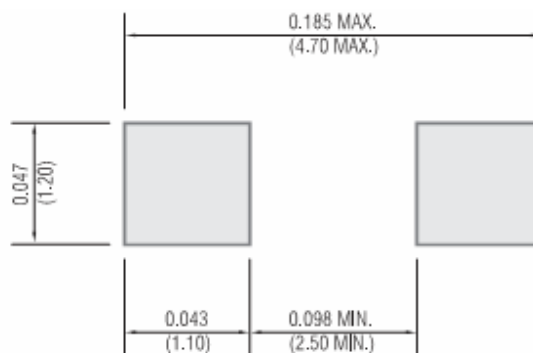
BAT42W/43W

Dimensions in inch (mm)



SOD-123

Mounting Pad Layout in inch (mm)



Packing Information

Tape and Reel --- 3K per 7" Plastic Reel

10K per 13" Plastic Reel

Two Terminals Schottky Barrier Diodes

BAT42W/43W

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