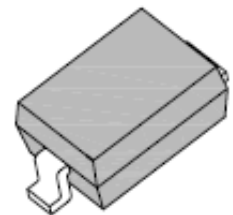


Two Terminals Schottky Barrier Diodes

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



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 ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	BAT42W	BAT43W	Unit	Conditions
	Marking	L2	L3		
V_{RRM}	Peak Repetitive Reverse Voltage	30		V	
V_{RRS}	RMS Reverse Voltage	21		V	
V_{DC}	Max. DC Blocking Voltage	30		V	
I_{F(AV)}	Max. Average Rectified Current	0.2		A	T _a =25 °C
I_{FSM}	Peak Forward Surge Current	4		A	At 1.0 ms single half sine-wave superimposed on rated load(JEDEC method)
R_{thJA}	Typical Thermal Resistance	635		°C /W	
T_J	Junction Temperature	125		°C	
T_{STG}	Storage Temperature Range	-55 to +125		°C	

Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	BAT42W	BAT43W	Unit	Conditions
V_F	Max. Forward Voltage	-	0.33	V	I _F =2mA
		0.4	-		I _F =10mA
		1.0			I _F =200mA
I_R	Max. DC Reverse Current	0.5		uA	at Rated DC Blocking Voltage
C_J	Typical Junction Temperature	10		pF	V _R =0V, f=1MHz

Two Terminals Schottky Barrier Diodes

BAT42W/43W

Typical Characteristics Curves

Fig.1- Typical I_F vs. V_F

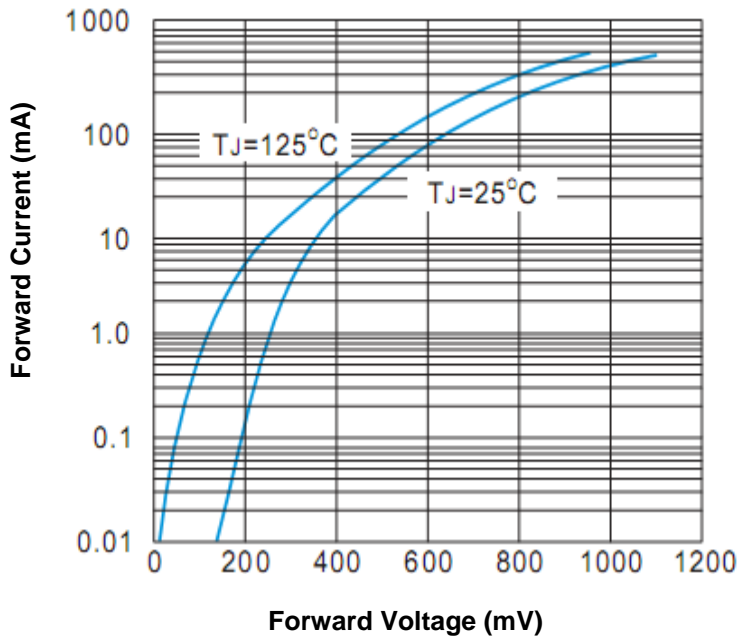


Fig.2- Typical $I_{F(AV)}$ vs. T_a

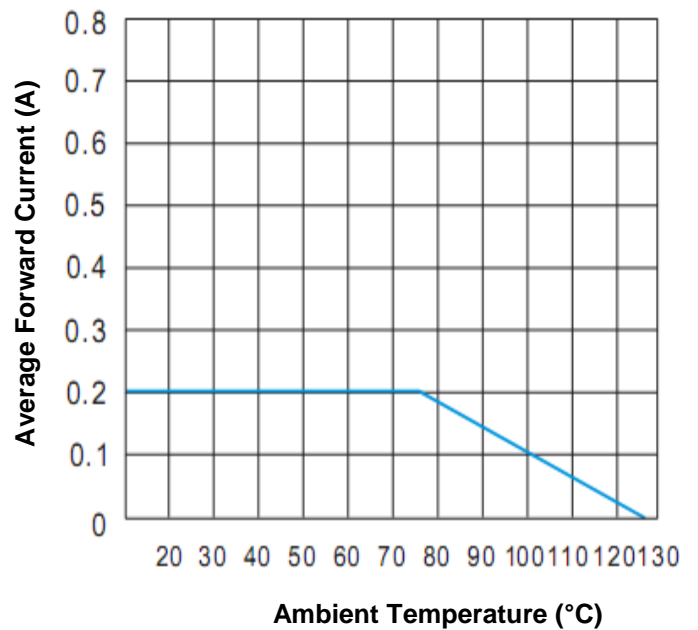


Fig.3- Typical I_R vs. V_R

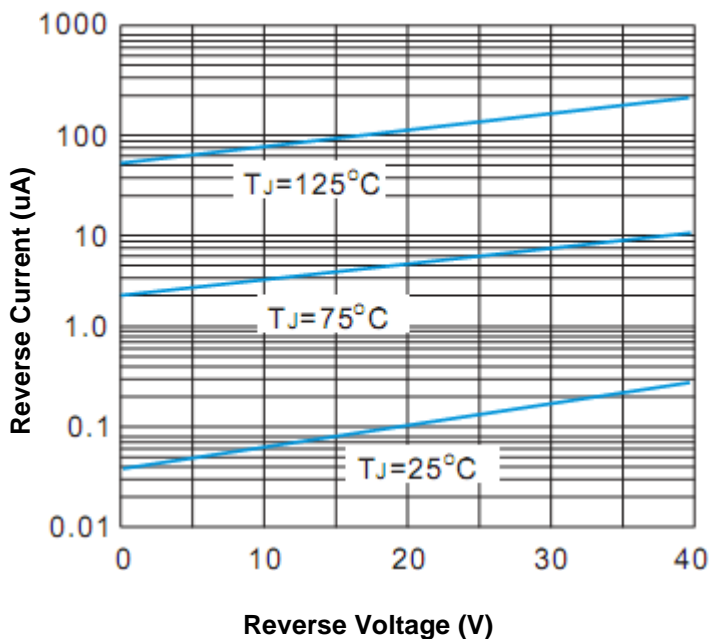
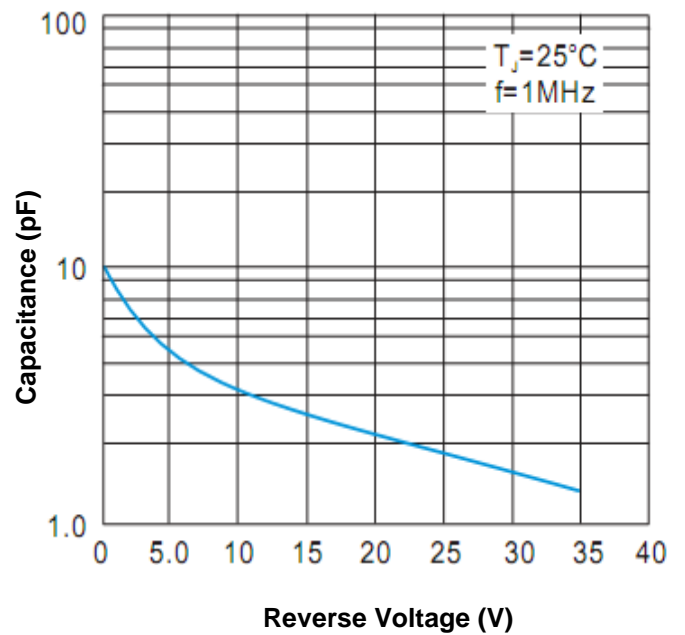


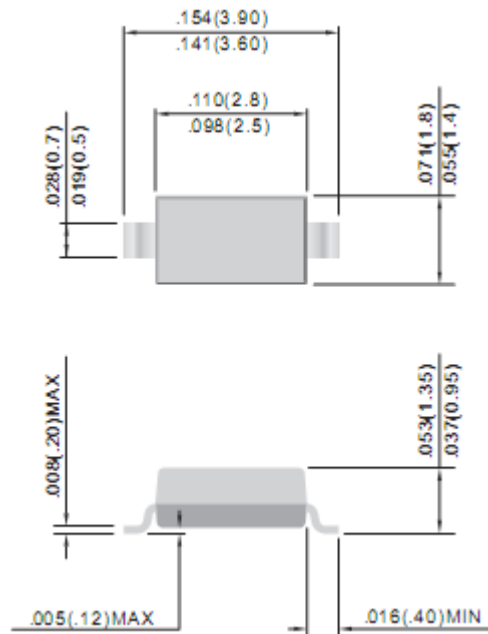
Fig.4- Typical C_J vs. V_R



Two Terminals Schottky Barrier Diodes

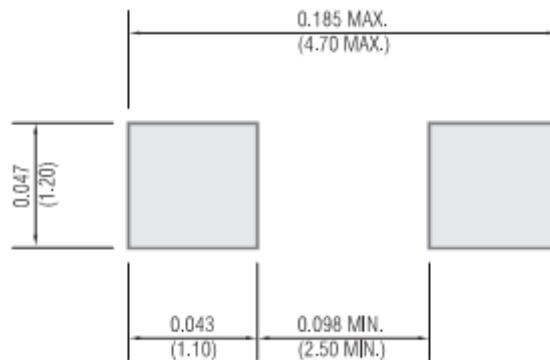
BAT42W/43W

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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