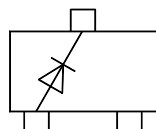


SWITCHING DIODE

FEATURES

- **Fast Switching Speed**
- **For General Purpose Switching Applications**
- **High Conductance**
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**



SOT-323



Marking: A2

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	100	V
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Peak forward surge current @=1.0μs @=1.0s	I _{FSM}	2.0 1.0	A
Power Dissipation	P _D	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	K/W
Junction temperature	T _j	150	°C
Operating/Storage temperature	T _{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	V _{(BR)R}	I _R = 10μA	75		V
Reverse voltage leakage current	I _R	V _R =75V V _R =20V		1 25	μA nA
Forward voltage	V _F	I _F =1mA I _F =10mA I _F =50mA I _F =150mA		0.715 0.855 1 1.25	V
Diode capacitance	C _D	V _R =0, f=1MHz		2	pF
Reveres recovery time	t _{rr}	I _F =I _R =10mA, I _{rr} =0.1×I _R , R _L =100Ω		4	nS



Typical Characteristics

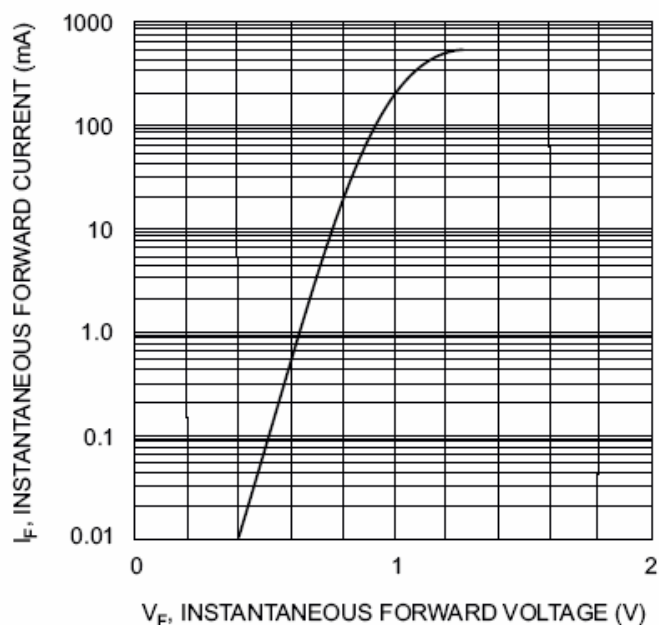


Fig. 1 Forward Characteristics

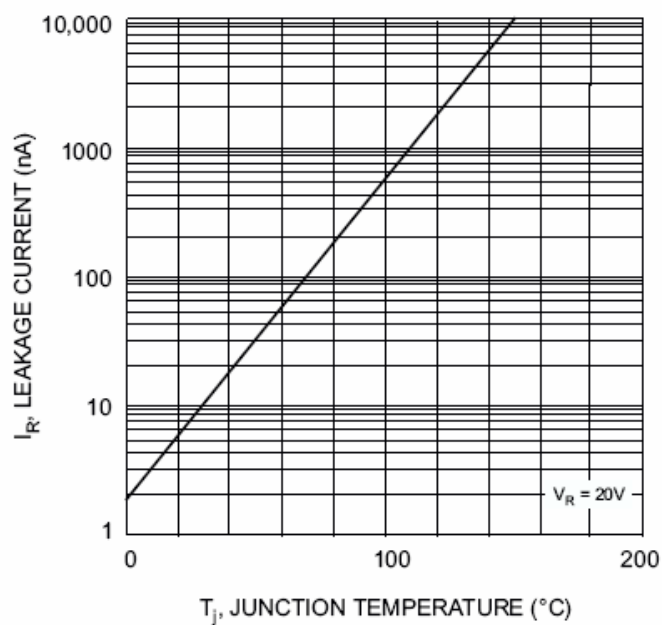
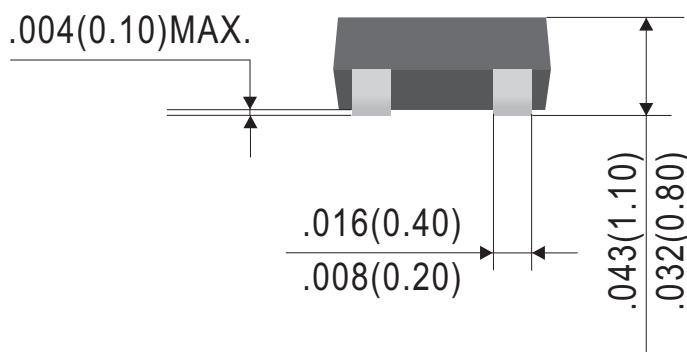
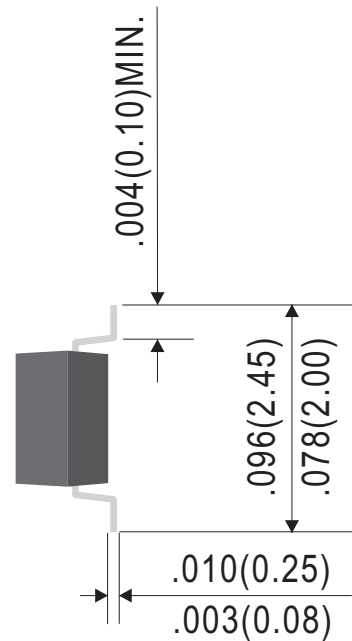
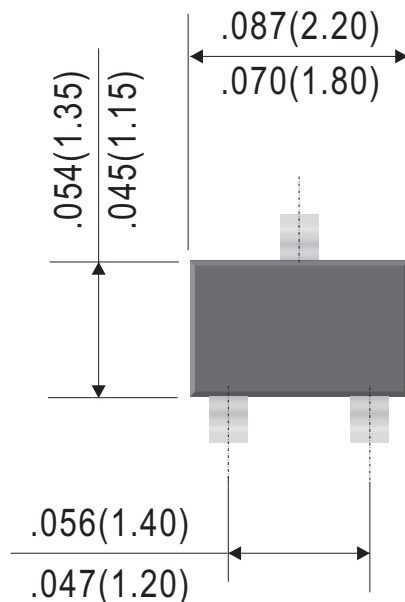


Fig. 2 Leakage Current vs Junction Temperature



Outline Drawing

SOT-323



Dimensions in inches and (millimeters)

Ordering Information:

Device PN	Packing
MMBD4148W-T ⁽¹⁾ H ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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