



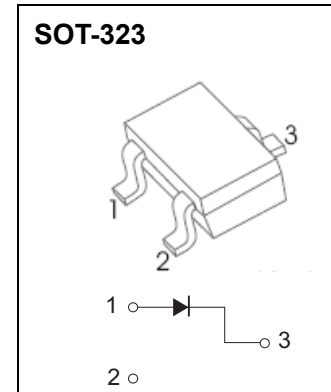
SOT-323 Plastic-Encapsulate Diodes

MMBD4148W/BAS16W

SWITCHING DIODE

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



MARKING: A2

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

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
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 @t=1.0μs	I_{FSM}	2.0	A
@t=1.0s		1.0	
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{θJA}$	625	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55~+150	°C

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

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 10\mu A$	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}	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R,$ $R_L = 100\Omega$		4	ns