

Surface Mount Fast Switching Diode

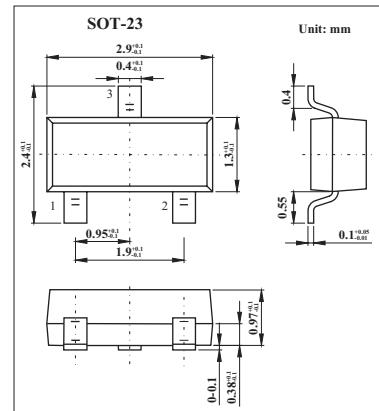
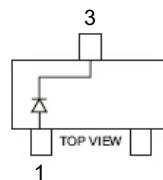
KMBD4148

Features

Fast Switching Speed

For General Purpose Switching Applications

High Conductance



Absolute Maximum Ratings Ta = 25

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}		
Working Peak Reverse Voltage	V _{RWM}	75	V
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current (Note 1)	I _{FM}	300	mA
Average Rectified Output Current (Note 1)	I _O	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs @ t = 1.0s	I _{FSM}	2 1	A
Power Dissipation (Note 1)	P _D	350	mW
Thermal Resistance Junction to Ambient Air (Note 1)	R _{θJA}	357	/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150	

Electrical Characteristics Ta = 25

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Breakdown Voltage	V _R	I _R = 100 μA	75			V
Forward Voltage	V _F	I _F = 1.0mA I _F = 10mA I _F = 50mA I _F = 150mA			0.715 0.855 1.0 1.25	V
Reverse Current	I _R	V _R = 75V V _R = 75V, T _j = 150 V _R = 25V, T _j = 150			1.0 50 30	μA μA μA
Total Capacitance	C _T	V _R = 0, f = 1.0MHz			2.0	pF
Reverse Recovery Time	t _{rr}	I _F = I _R = 10mA, I _{rr} = 0.1 x I _R , R _L = 100 Ω			4.0	ns

Note 1. Device mounted on fiberglass substrate 40 x 40 x 1.5mm.

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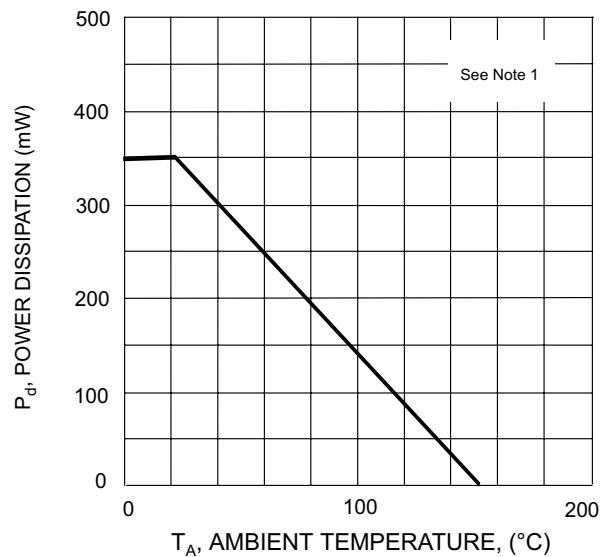


Fig. 1 Power Derating Curve

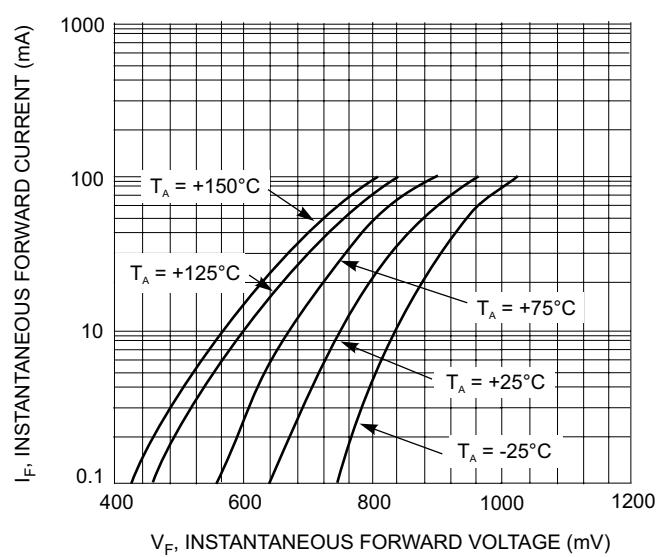


Fig. 2, Typical Forward Characteristics

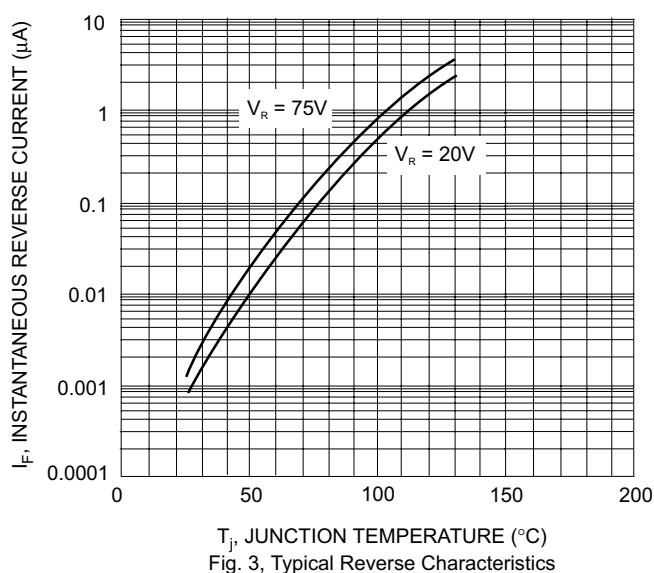


Fig. 3, Typical Reverse Characteristics