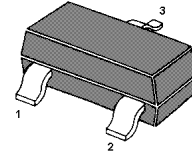
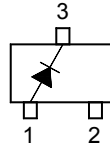


MMBD4448

SURFACE MOUNT SWITCHING DIODE

Features

- Fast switching speed
- High Conductance



Applications

- For general purpose switching

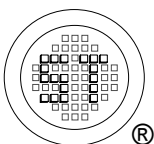
Marking Code: **5D**
SOT-23 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit	
Peak Reverse Voltage	V_{RM}	100	V	
Reverse Voltage	V_R	75	V	
Average Rectified Output Current	I_O	250	mA	
Forward Continuous Current	I_{FM}	500	mA	
Non-repetitive Peak Forward Surge Current	I_{FSM}	at $t = 1\text{ }\mu\text{s}$	4	A
		at $t = 1\text{ s}$	2	
Power Dissipation	P_d	350	mW	
Junction and Storage Temperature Range	T_j, T_s	- 65 to + 150	$^\circ\text{C}$	

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 100\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	0.62	0.72	V
		-	0.855	
		-	1	
		-	1.25	
Reverse Current at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 25\text{ V}, T_j = 150\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$	I_R	-	25	nA
		-	2.5	μA
		-	30	μA
		-	50	μA
Junction Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$	C_j	-	4	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002 Certificate No. 05103
ISO 14001:2004 Certificate No. 7116
ISO 9001:2000 Certificate No. 0506098

Dated : 10/10/2008

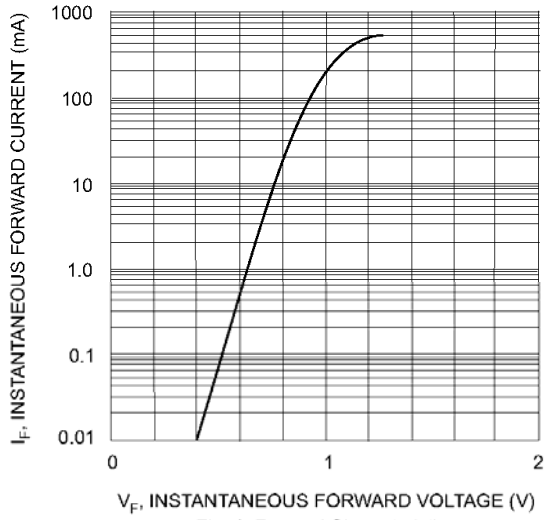


Fig. 1 Forward Characteristics

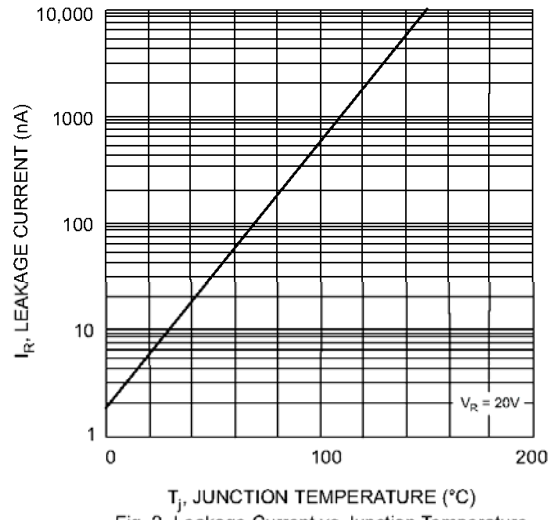
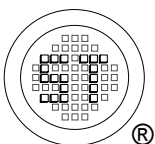


Fig. 2 Leakage Current vs Junction Temperature



SEMTECH ELECTRONICS LTD.
 (Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)

