



FUKUCOM COMPANY LTD.

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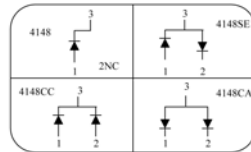
FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

MMBD4148

Small Signal Switching Diode

- Fast Switching Speed
- Electrically Identical to Standard JEDEC 1N4148
- High Conductance



Absolute Maximum Ratings Ta=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V _{RRM}	Peak Repetitive Reverse Voltage	75	V
V _{RWM}	Working Peak Reverse Voltage		
V _R	DC Blocking Voltage		
V _{R(RMS)}	RMS Reverse Voltage	53	V
I _{FM}	Forward Continuous Current (Note)	300	mA
P _D	Power Dissipation	350	mW
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55-150	°C

Electrical Characteristics Ta=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
V _{FM}	Forward Voltage	I _F =10mA			1.0	V
I _{RM}	Maximum Peak Reverse Current	V _R =75V			5.0	nA
		V _R =70V, T _j =150°C			50	uA
		V _R =20V, T _j =150°C			30	uA
		V _R =20V			25	nA
C _j	Capacitance	V _R =0, f=1.0MHz			4	pF
T _{rr}	Reverse Recovery Time	I _F =10mA, V _R =6.0V I _{RR} =1.0mA, R _L =100Ω			4	η s

Marking: MMBD4148 =5H / A6 MMBD4148CC=A5
 MMBD4148SE=A4 MMBD4148CA=A3



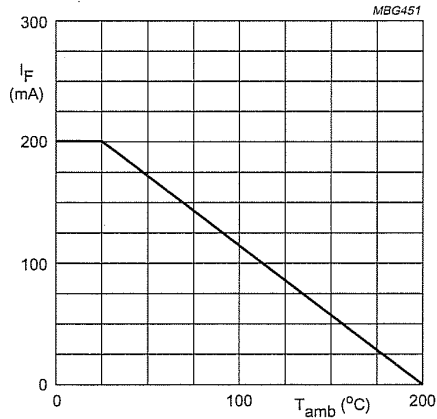
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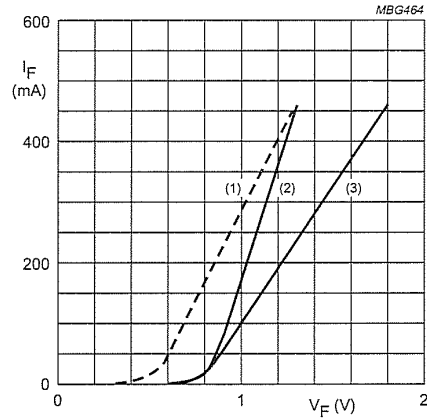
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GRAPHICAL DATA



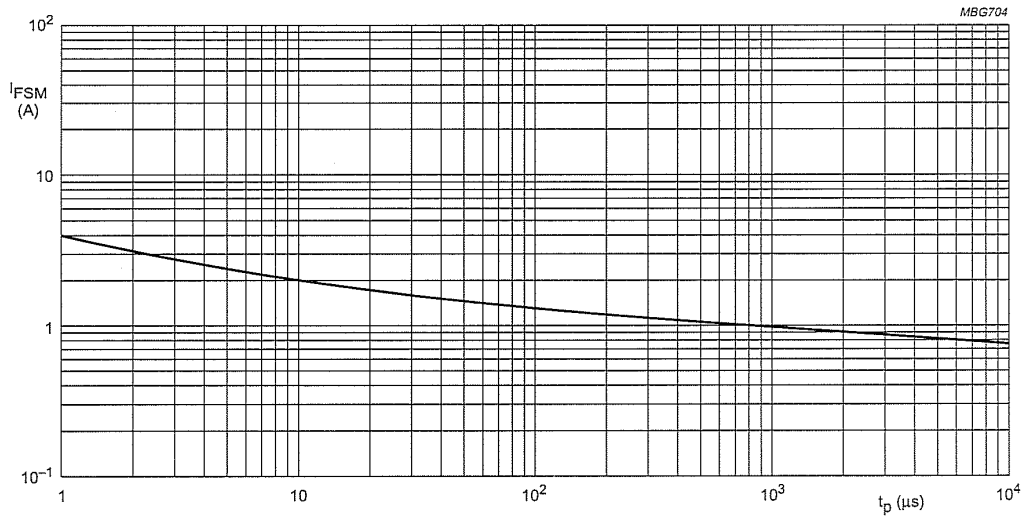
Device mounted on an FR4 printed-circuit board; lead length 10 mm.

Fig.2 Maximum permissible continuous forward current as a function of ambient temperature.



- (1) $T_j = 175^\circ\text{C}$; typical values.
- (2) $T_j = 25^\circ\text{C}$; typical values.
- (3) $T_j = 25^\circ\text{C}$; maximum values.

Fig.3 Forward current as a function of forward voltage.



Based on square wave currents.
 $T_j = 25^\circ\text{C}$ prior to surge.

Fig.4 Maximum permissible non-repetitive peak forward current as a function of pulse duration.

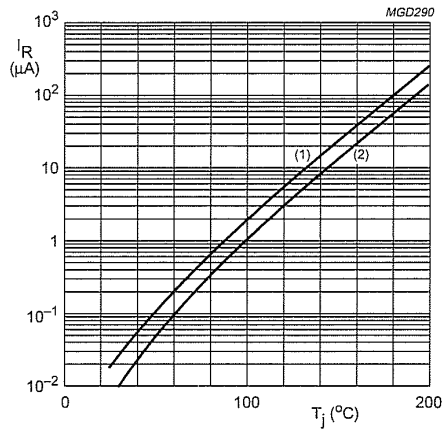


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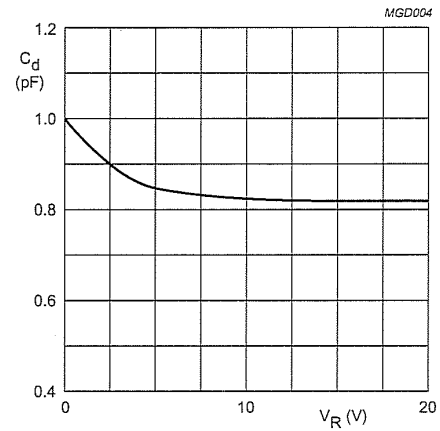
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- (1) $V_R = 75\text{ V}$; typical values.
- (2) $V_R = 20\text{ V}$; typical values.

Fig.5 Reverse current as a function of junction temperature.



$f = 1\text{ MHz}$; $T_j = 25\text{ }^{\circ}\text{C}$.

Fig.6 Diode capacitance as a function of reverse voltage; typical values.