CHINA BASE INTERNATIONAL

SOT-23

MMBD4148 / SE / CC / CA

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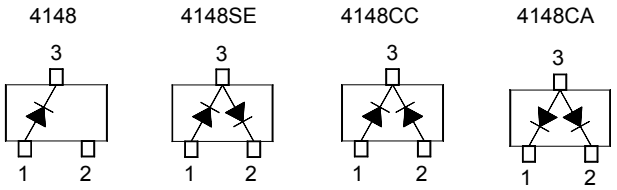
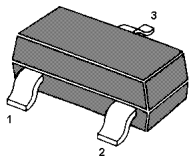
Silicon Epitaxial Planar Switching Diode





MMBD4148 Marking Code: **5H**
MMBD4148SE Marking Code: **D4**
MMBD4148CC Marking Code: **D5**
MMBD4148CA Marking Code: **D6**
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
DC Forward Current	I_{FM}	600	mA
Recurrent Peak Forward Current	I_{FRM}	700	mA
Non-repetitive Peak Forward Surge Current at t = 1 s at t = 1 µs	I_{FSM}	1 2	A
Total Device Dissipation	P_{tot}	350	mW
Operating Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I_F = 10 mA	V_F	-	1	V
Reverse Breakdown Voltage at I_R = 100 µA at I_R = 5 µA	$V_{(BR)R}$	100 75	- -	V
Reverse Current at V_R = 20 V at V_R = 75 V at V_R = 20 V, T_a = 150 °C	I_R	- - -	25 5 50	nA µA µA
Reverse Recovery Time at I_F = 10 mA, V_R = 6 V, I_{RR} = 1 mA, R_L = 100 Ω	t_{rr}	-	4	ns
Total Capacitance at V_R = 0 V, f = 1 MHz	C_T	-	4	pF

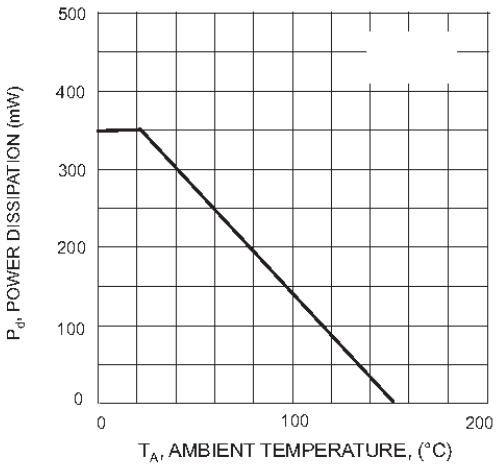


Fig. 1 Power Derating Curve

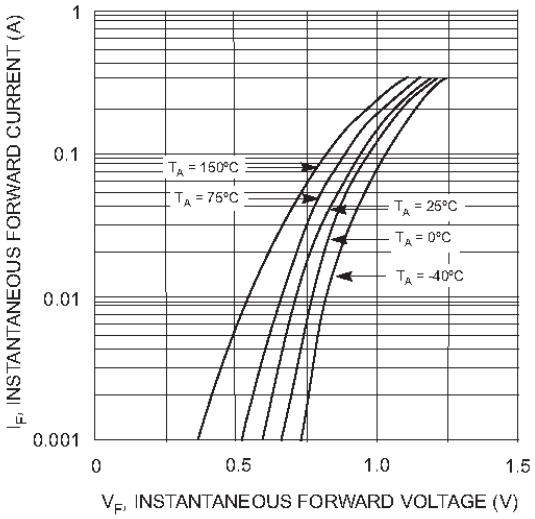


Fig. 2 Forward Characteristics

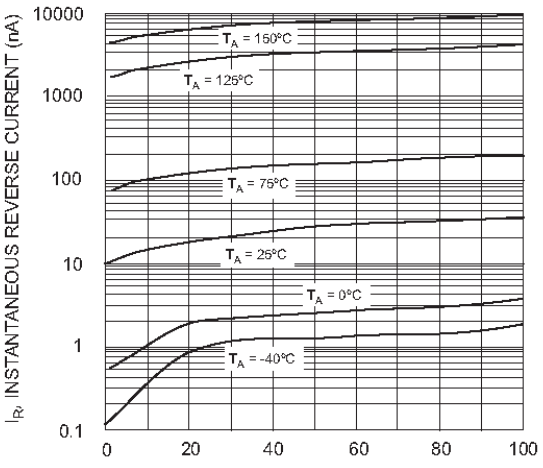


Fig. 3 Typical Reverse Characteristics

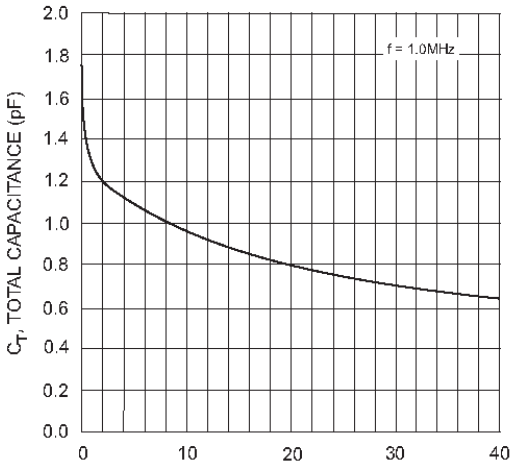


Fig. 4 Typical Capacitance vs. Reverse Voltage