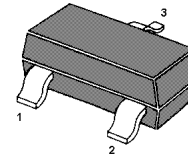
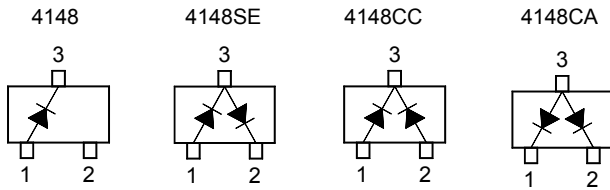




Silicon Epitaxial Planar Switching Diode



MMBD4148 Marking Code: **5D**  
 MMBD4148SE Marking Code: **A7**  
 MMBD4148CC Marking Code: **A4**  
 MMBD4148CA Marking Code: **A1**  
 SOT-23 Plastic Package

**Absolute Maximum Ratings (T<sub>a</sub> = 25 °C)**

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Reverse Voltage	V <sub>R</sub>	75	V
Average Rectified Forward Current	I <sub>F(AV)</sub>	200	mA
DC Forward Current	I <sub>FM</sub>	600	mA
Recurrent Peak Forward Current	I <sub>FRM</sub>	700	mA
Non-repetitive Peak Forward Surge Current	I <sub>FSM</sub>	1 2	A
		at t = 1 s at t = 1 μs	
Total Device Dissipation	P <sub>tot</sub>	350	mW
Operating Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to + 150	°C

**Characteristics at T<sub>a</sub> = 25 °C**

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I <sub>F</sub> = 10 mA	V <sub>F</sub>	-	1	V
Reverse Breakdown Voltage at I <sub>R</sub> = 100 μA at I <sub>R</sub> = 5 μA	V <sub>(BR)R</sub>	100 75	- -	V
Reverse Current at V <sub>R</sub> = 20 V at V <sub>R</sub> = 75 V at V <sub>R</sub> = 20 V, T <sub>a</sub> = 150 °C	I <sub>R</sub>	- - -	25 5 50	nA μA μA
Reverse Recovery Time at I <sub>F</sub> = 10 mA, V <sub>R</sub> = 6 V, I <sub>RR</sub> = 1 mA, R <sub>L</sub> = 100 Ω	t <sub>rr</sub>	-	4	ns
Total Capacitance at V <sub>R</sub> = 0 V, f = 1 MHz	C <sub>T</sub>	-	4	pF

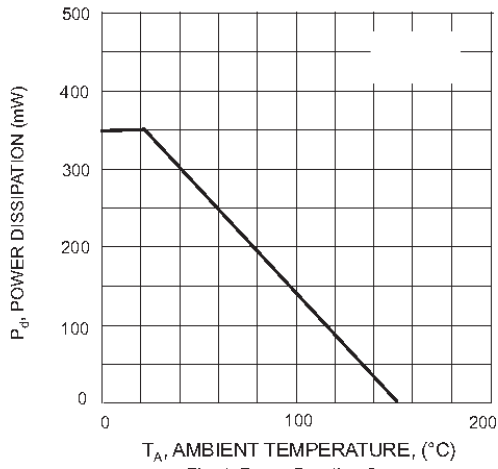


Fig. 1 Power Derating Curve

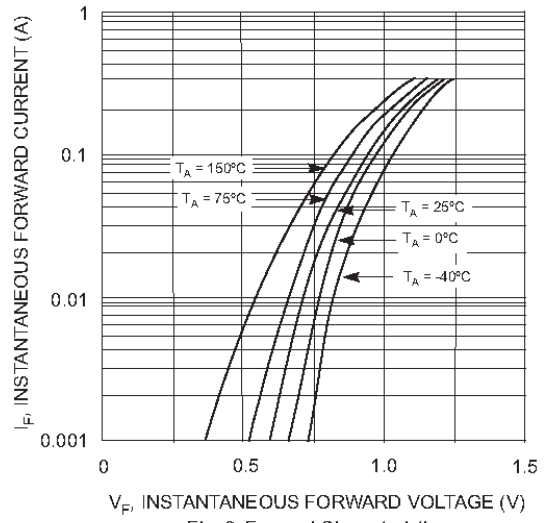


Fig. 2 Forward Characteristics

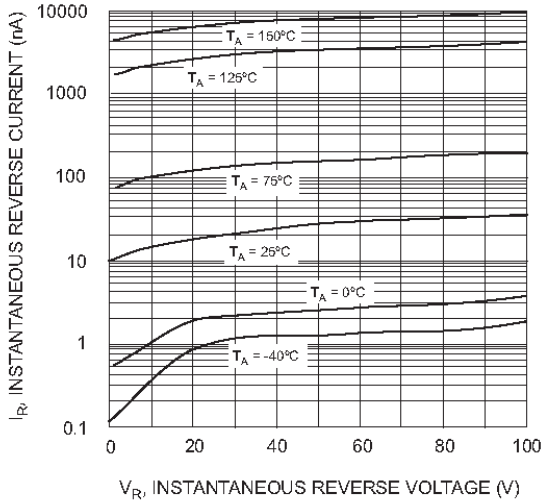


Fig. 3 Typical Reverse Characteristics

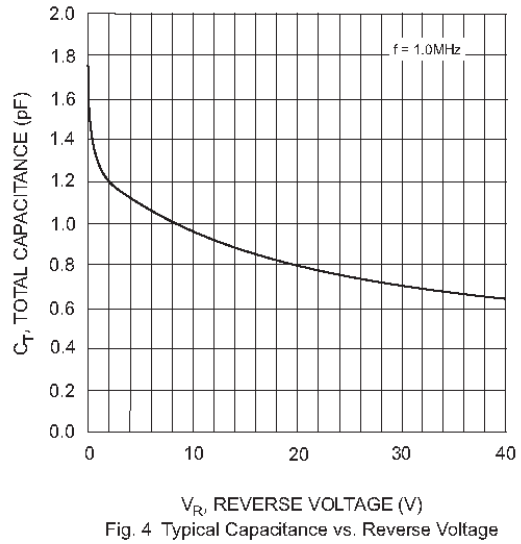


Fig. 4 Typical Capacitance vs. Reverse Voltage