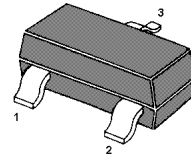


MMBD4148 / SE / CC / CA-AH

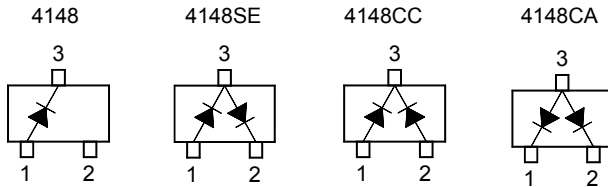
Silicon Epitaxial Planar Switching Diode

Features

- AEC-Q101 Qualified and PPAP Capable
- Halogen and Antimony Free(HAF), RoHS compliant



MMBD4148 Marking Code: **5D**
MMBD4148SE Marking Code: **A7**
MMBD4148CC Marking Code: **A4**
MMBD4148CA Marking Code: **A1**
TO-236 Plastic Package

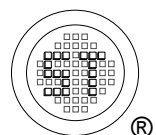


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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	I_{FSM}	1 2	A
		at $t = 1$ s at $t = 1$ μ s	
Total Device Dissipation	P_{tot}	350	mW
Operating Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 10$ mA	V_F	-	1	V
Reverse Breakdown Voltage at $I_R = 100$ μ A at $I_R = 5$ μ A	$V_{(BR)R}$	100 75	- -	V
Reverse Current at $V_R = 20$ V at $V_R = 75$ V at $V_R = 20$ V, $T_a = 150^\circ\text{C}$	I_R	- - -	25 5 50	nA μ A μ A
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



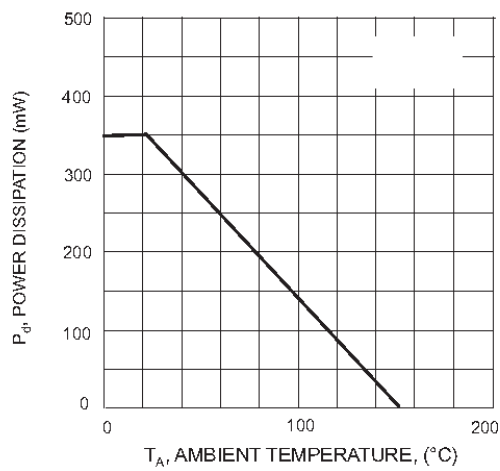


Fig. 1 Power Derating Curve

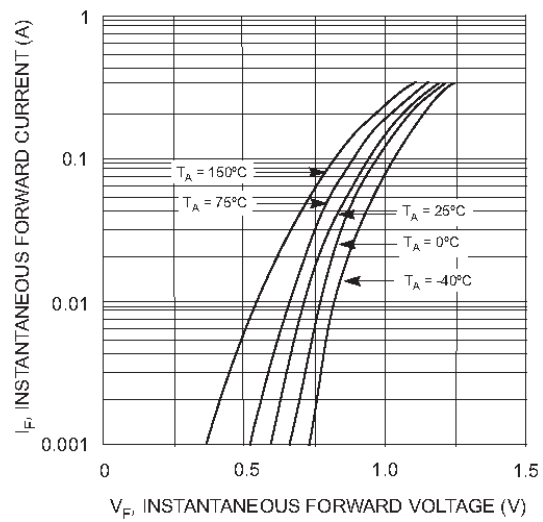


Fig. 2 Forward Characteristics

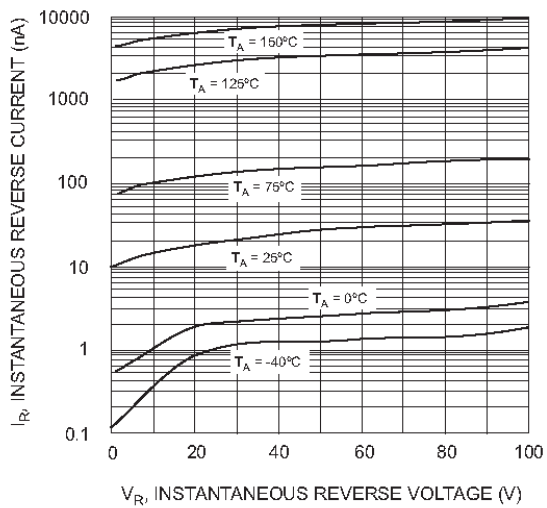


Fig. 3 Typical Reverse Characteristics

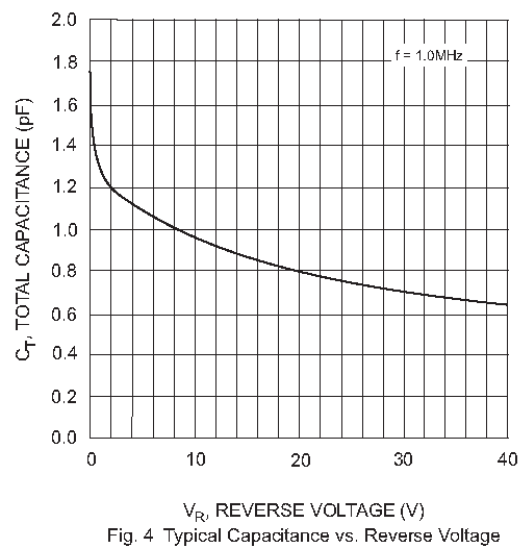


Fig. 4 Typical Capacitance vs. Reverse Voltage

