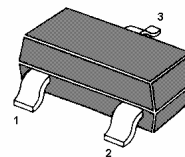
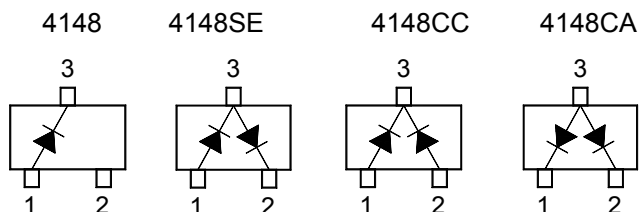


**MMBD4148 / SE / CC / CA****HIGH CONDUCTANCE ULTRA FAST DIODES**

SOT-23 Plastic Package

MMBD4148SE

MMBD4148CC

MMBD4148CA

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

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified 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 Pulse width = 1 s Pulse width = 1 μ s	I_{FSM}	1 2	A A
Total Device Dissipation	P_{tot}	350	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	$^{\circ}\text{C/W}$
Operating Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_S	-55 to +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$ at $I_R = 5\text{ }\mu\text{A}$	V_R V_R	100 75	- -	V V
Forward Voltage at $I_F = 10\text{ mA}$	V_F	-	1	V
Reverse Current at $V_R = 20\text{ V}$ at $V_R = 20\text{ V}$, $T_A = 150\text{ }^{\circ}\text{C}$ at $V_R = 75\text{ V}$	I_R	- - -	25 50 5	nA μA μA
Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $I_{RR} = 1\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	4	pF

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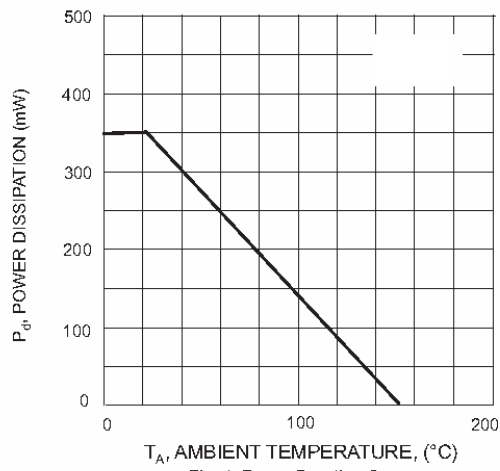


Fig. 1 Power Derating Curve

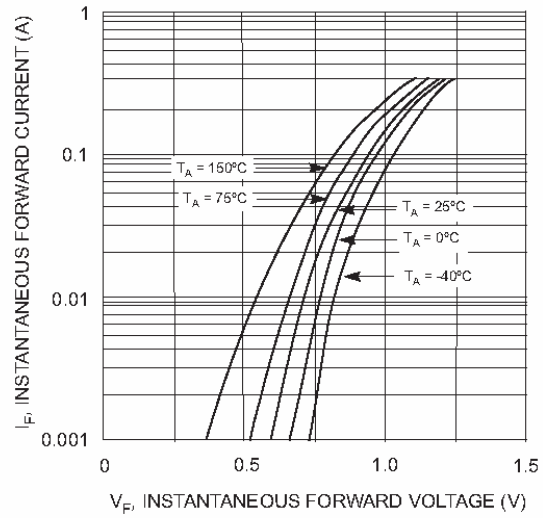


Fig. 2 Forward Characteristics

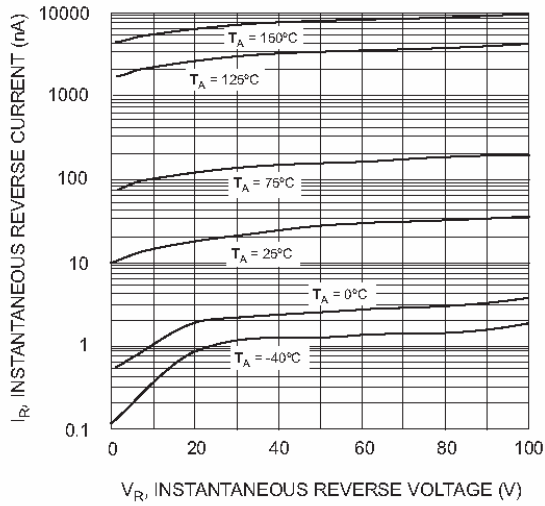


Fig. 3 Typical Reverse Characteristics

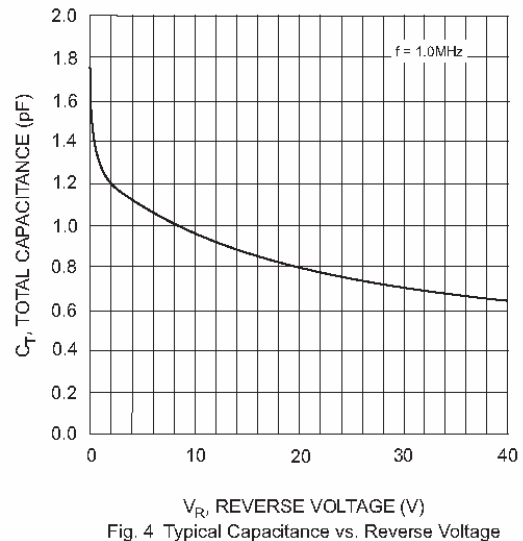


Fig. 4 Typical Capacitance vs. Reverse Voltage