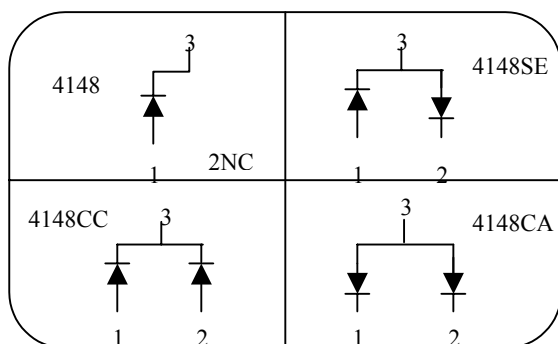
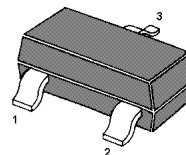


MMBD4148 / SE / CC / CALT1

HIGH CONDUCTANCE ULTRA FAST DIODES



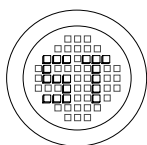
SOT-23



SOT-23 Plastic Package

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

	Symbol	Value	Unit
Working Inverse Voltage	W_{IV}	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	I_{FSM}	1	A
Pulse width = 1 second		2	A
Pulse width = 1 microsecond			
Total Device Dissipation	P_{tot}	350	mW
Derate above 25°C		2.8	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$
Operating Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_S	-55 to +150	$^\circ\text{C}$



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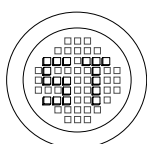


ISO 14001 Certificate No. 7116
Dated : 13/09/2003

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

	Symbol	Min.	Typ.	Max.	Unit
Breakdown Voltage					
at $I_R = 100\mu\text{A}$	V_R	100	-	-	V
at $I_R = 5\mu\text{A}$	V_R	75	-	-	V
Maximum Instantaneous Forward Voltage					
at $I_F = 10\text{mA}$	V_{FM}	-	-	1	V
Maximum Instantaneous Reverse Current					
at $V_R = 20\text{V}$	I_{RM}	-	-	25	nA
at $V_R = 20\text{V}$, $T_A = 150^\circ\text{C}$		-	-	50	μA
at $V_R = 75\text{V}$		-	-	5	μA
Reverse Recovery Time					
at $I_F = 10\text{mA}$, $V_R = 6\text{V}$, $I_{RR} = 1\text{mA}$, $R_L = 100\Omega$	t_{rr}	-	-	4	Ns
Diode Capacitance					
at $f = 1\text{MHz}$	C_O	-	-	4	pF



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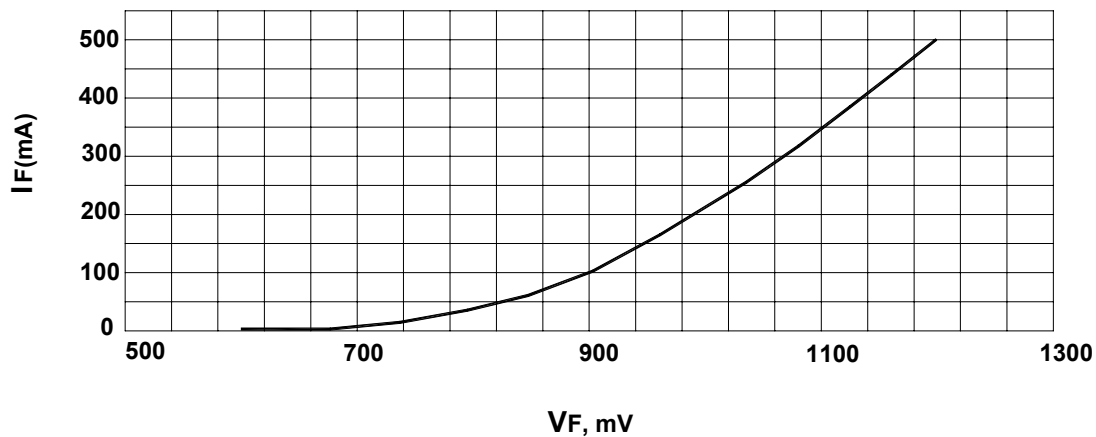
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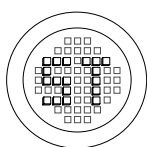
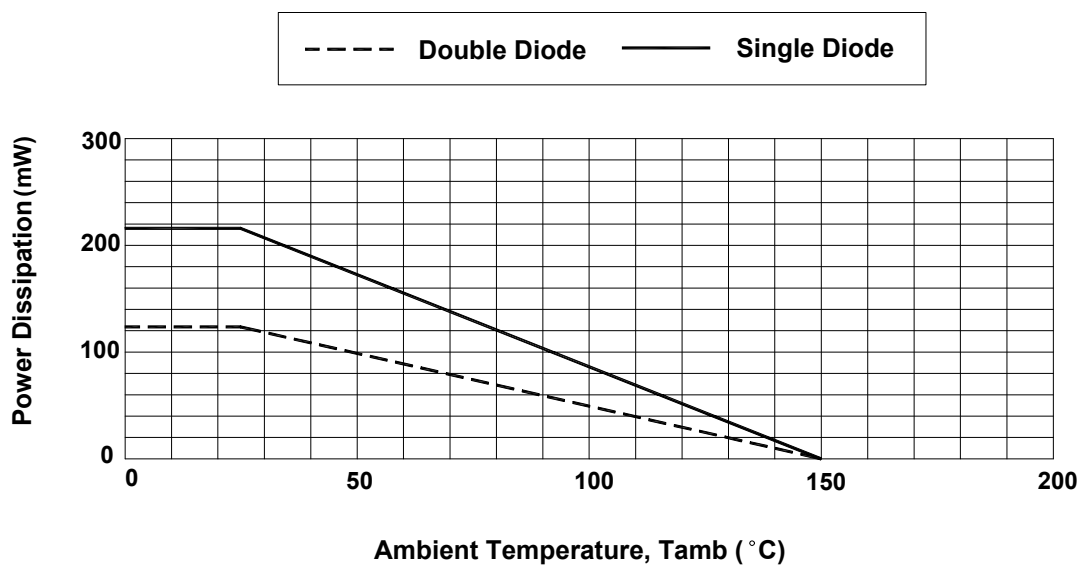
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Typical Forward Voltage



Power Derating Curve



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