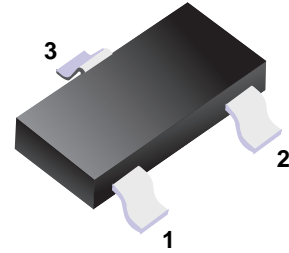


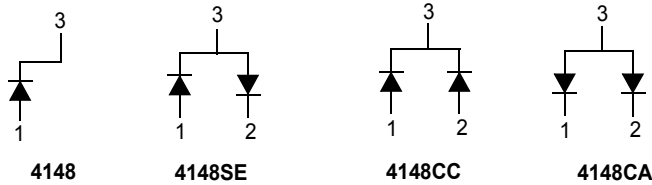
■ Switching Diodes

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



■ Simplified outline(SOT-23)



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	75	
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{RMS}	53	mA
Average Rectified Output Current	I _O	150	
Peak Forward Surge Current	I _{FM}	300	A
Peak Forward Surge Current @ t=1μs	I _{FSM}	2	
@ t=1s		1	
Power Dissipation	P _d	350	mW
Thermal Resistance Junction to Ambient	R _{θJA}	357	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

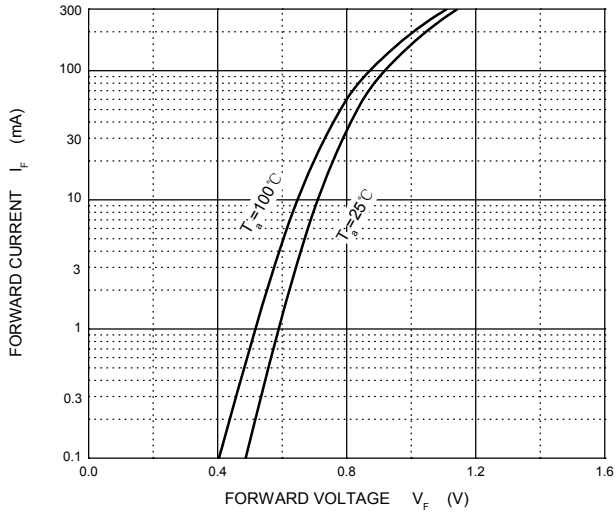
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V _R	I _R = 100 μA	75			V
Forward voltage	V _{F1}	I _F = 1 mA			0.715	
	V _{F2}	I _F = 10 mA			0.855	
	V _{F3}	I _F = 50 mA			1	
	V _{F4}	I _F = 150 mA			1.25	
Reverse voltage leakage current	I _{R1}	V _R = 75 V			2.5	μA
	I _{R2}	V _R = 20 V			25	nA
Capacitance between terminals	C _T	V _R = 0 V, f= 1 MHz			2	pF
Reverse recovery time	t _{rr}	I _F =I _R =10mA, I _{rr} =0.1xI _R , R _L =100Ω			4	ns

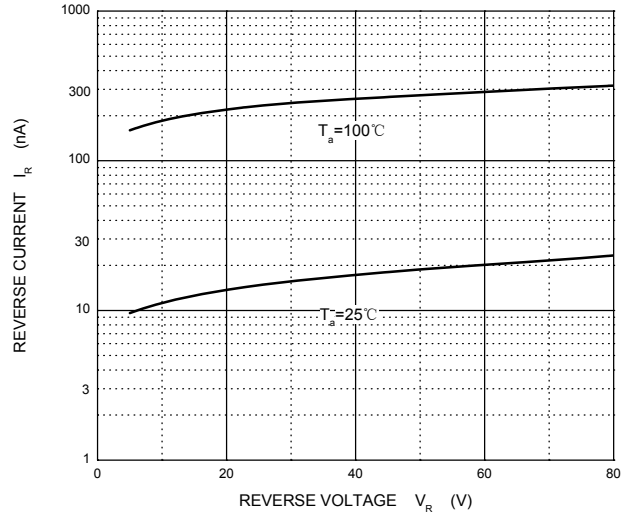
■ Marking

NO	MMBD4148	MMBD4148SE	MMBD4148CC	MMBD4148CA
Marking	A6	D4	D5	D6

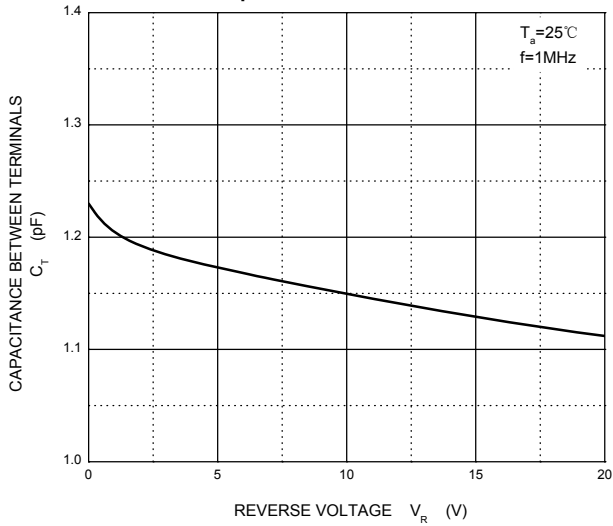
■ Typical Characteristics



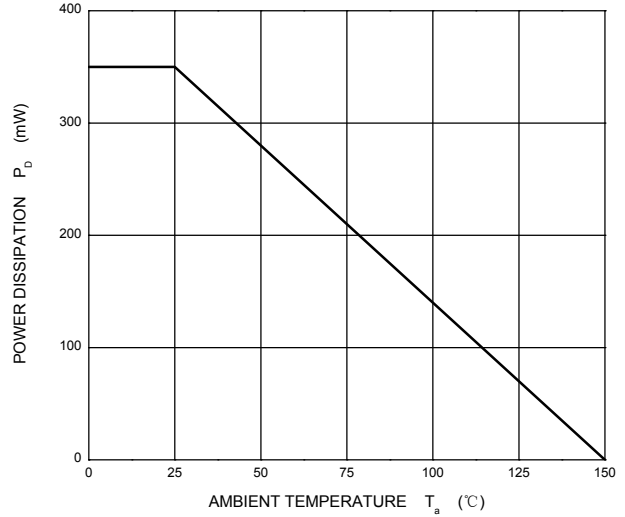
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



Package Outline

SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel, 7" reel	3000	EIA-481-1