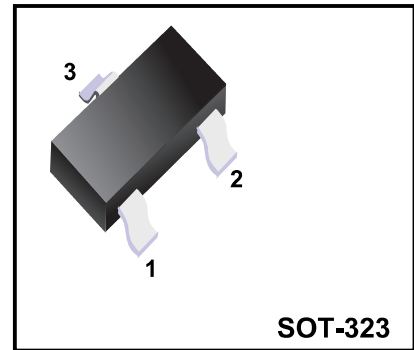
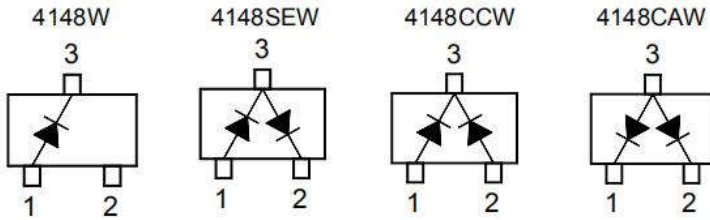


Silicon Epitaxial Planar Switching Diode



product name	Marking
MMBD4148W	A6
MMBD4148SEW	A7
MMBD4148CCW	PH
MMBD4148CAW	YX

Absolute Maximum Ratings (T_a = 25 °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 μs	
Total Device Dissipation	P _{tot}	350	mW
Operating Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I _F = 10 mA	V _F	-	1	V
Reverse Breakdown Voltage at I _R = 100 μA at I _R = 5 μA	V _{(BR)R}	100 75	- -	V
Reverse Current at V _R = 20 V at V _R = 75 V	I _R	- -	25 5	nA μA
at V _R = 20 V, T _a = 150 °C		-	50	μA
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

Typical Characteristics

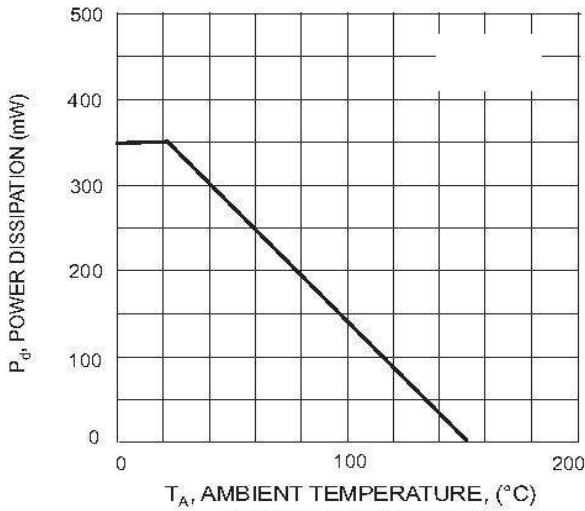


Fig. 1 Power Derating Curve

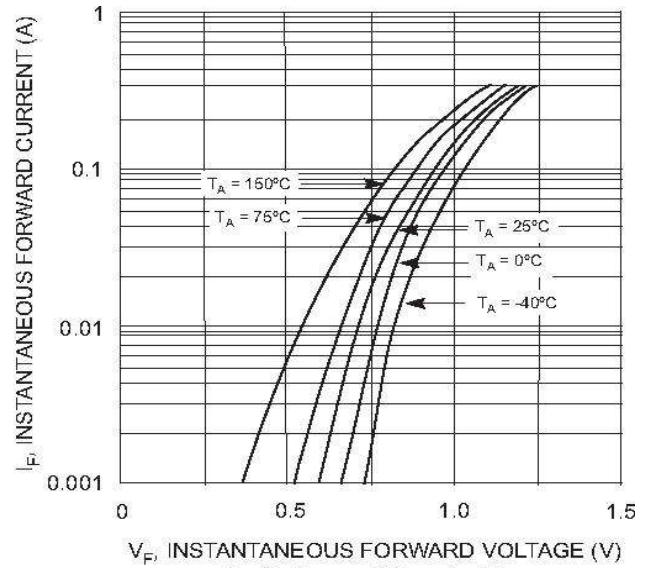


Fig. 2 Forward Characteristics

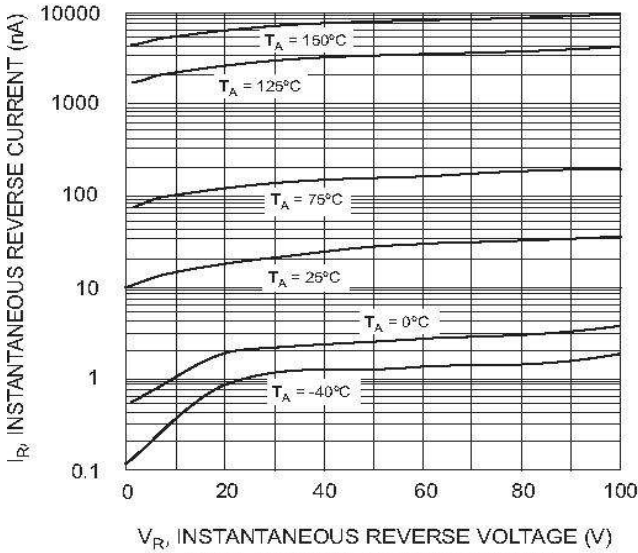


Fig. 3 Typical Reverse Characteristics

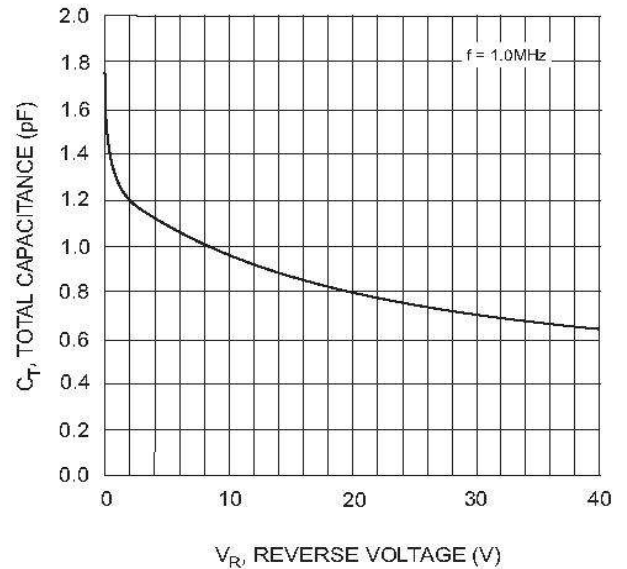


Fig. 4 Typical Capacitance vs. Reverse Voltage

Ordering information

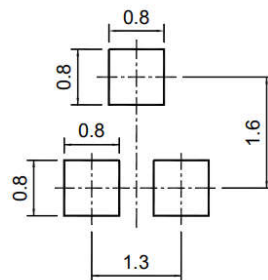
Package	Packing Description	Base Quantity	Packing Quantity
SOT-323	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-323

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
A1	0.1		4	
bp	0.3	0.4	12	16
C	0.10	0.25	4	10
D	1.8	2.2	71	87
E	1.15	1.35	45	53
E	1.3		51	
E1	0.65		26	
HE	2.0	2.2	79	87
Lp	0.15	0.45	6	18
Q	0.13	0.23	5.1	9
v	0.2		8	
W	0.2		8	

The recommended mounting pad size



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