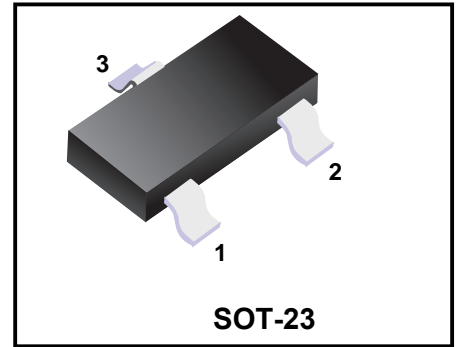
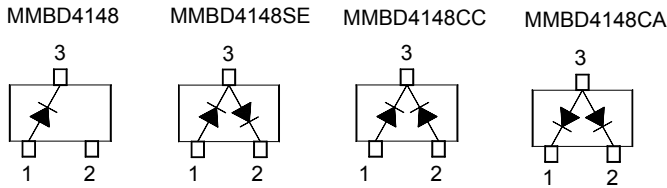


Silicon Epitaxial Planar Switching Diode

Marking Code

MMBD4148	KA2
MMBD4148SE	D4
MMBD4148CC	D5
MMBD4148CA	D6

Absolute Maximum Ratings (Ta = 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 μ s	
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 Ta = 25°C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 10$ mA	V_F	-	1	V
Reverse Breakdown Voltage at $I_R = 100$ 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, $T_a = 150$ °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

Typical Characteristics

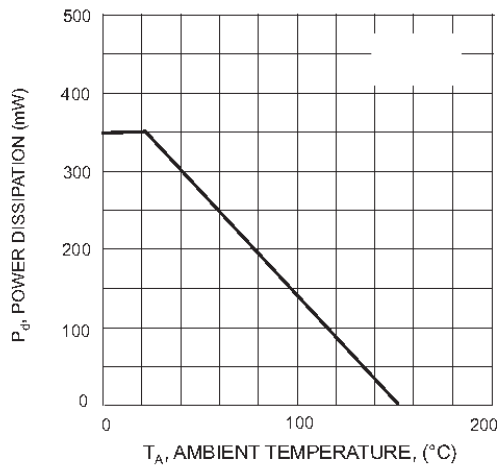


Fig. 1 Power Derating Curve

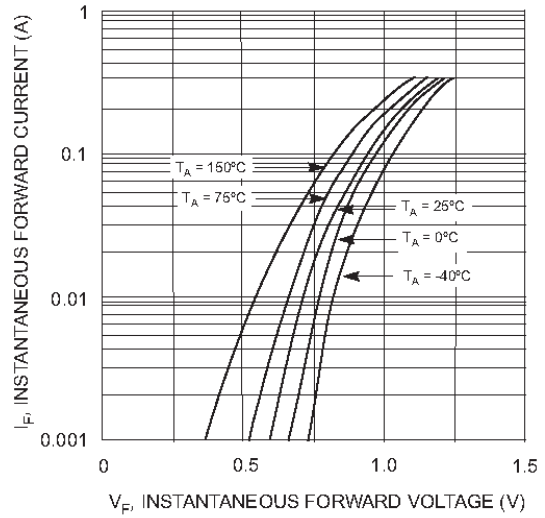


Fig. 2 Forward Characteristics

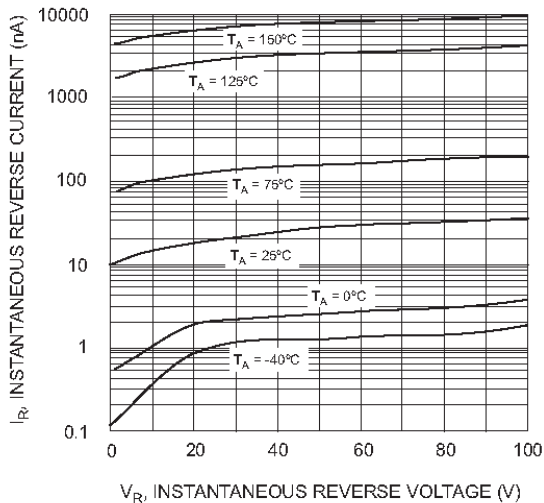


Fig. 3 Typical Reverse Characteristics

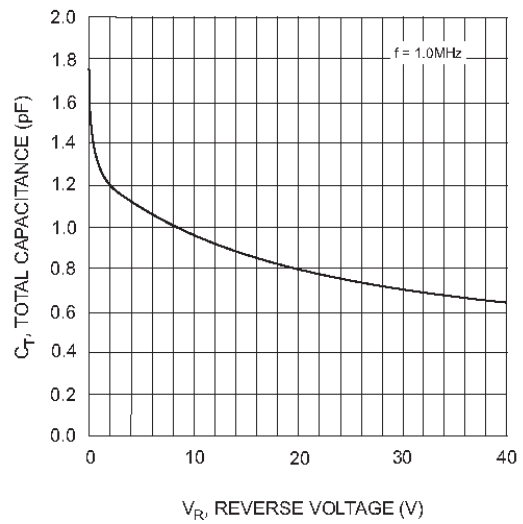


Fig. 4 Typical Capacitance vs. Reverse Voltage

Ordering information

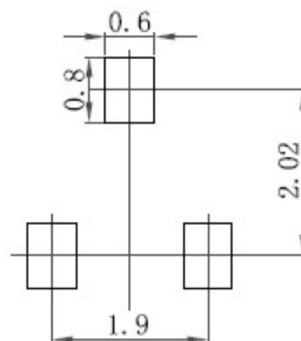
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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