

Surface mount switching diode

MMBD4148A/CA/CC/SE

FEATURES

- Fast switching speed.
- High conductance.
- For general purpose switching applications.
- Surface mount package ideally suited for automatic insertion.

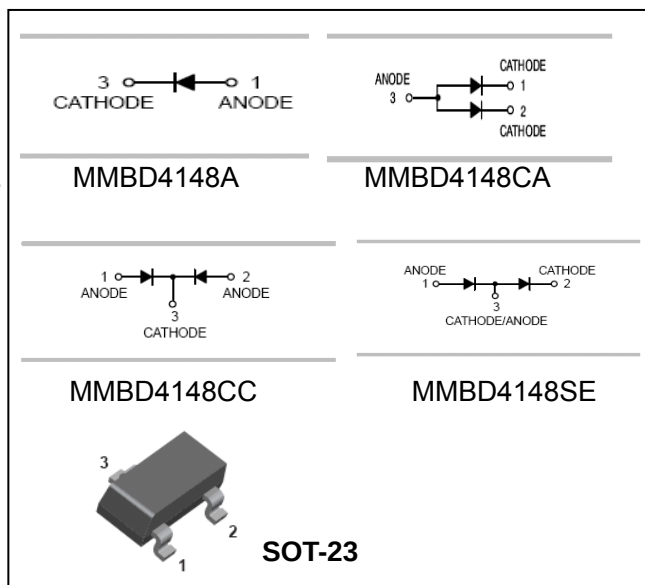


Lead-free

APPLICATIONS

- Small signal switching.

ORDERING INFORMATION



Type No.	Marking	Package Code
MMBD4148A	5H	SOT-23
MMBD4148CA	D6	SOT-23
MMBD4148CC	D5	SOT-23
MMBD4148SE	D4	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
DC Reverse Voltage	V_R	100	V
Forward Continuous Current(Max.)	I_{FM}	600	mA
Average rectified Current	$I_{F(AV)}$	200	mA
Recurrent peak forward current	I_{FRM}	700	mA
Non-repetitive peak forward surge current (1.0s) (1.0m)	I_{FSM}	1.0 2.0	A
Power Dissipation	P_d	350	mW
Thermal resistance,Junction to ambient	$R_{\theta JA}$	357	°C/W
Operating junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 to +150	°C



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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R1}$	100			V	$I_R=100\mu A$
	$V_{(BR)R2}$	75			V	$I_R=5\mu A$
Forward voltage	V_F			1	V	$I_F=10mA$
Reverse current	I_{R1}			25	nA	$V_R=20V$
	I_{R2}			5	μA	$V_R=75V$
Total Capacitance	C_T			4	pF	$V_R=0V, f=1MHz$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=10mA, V_R=6V$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

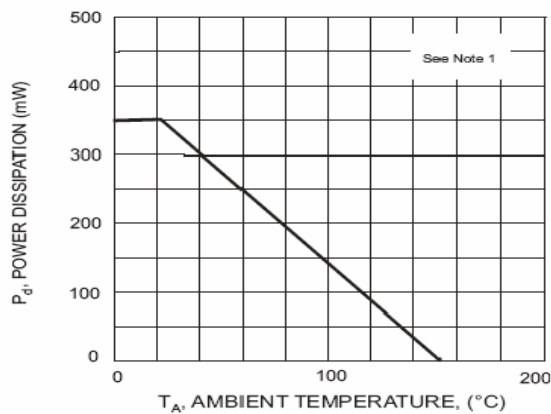


Fig. 1 Power Derating Curve

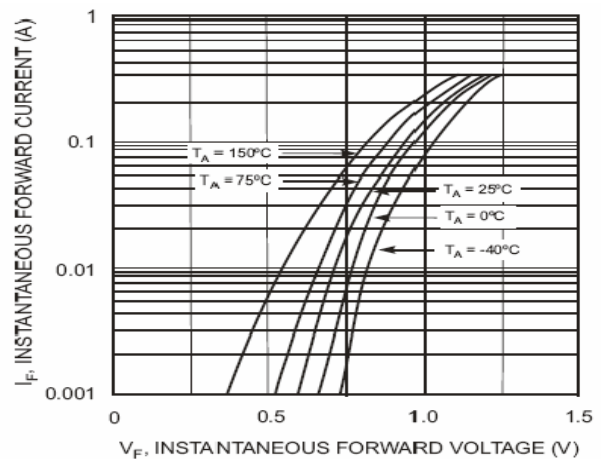


Fig. 2 Forward Characteristics

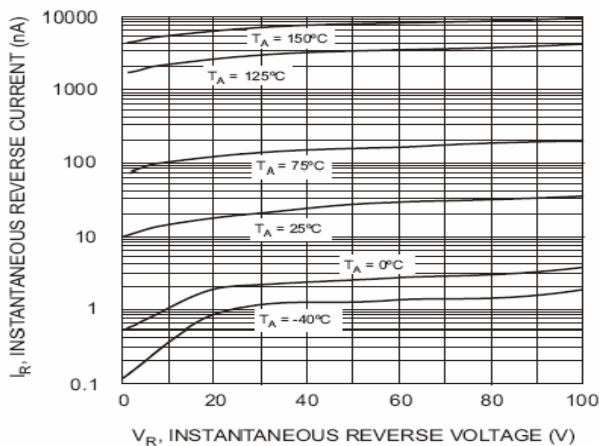


Fig. 3 Typical Reverse Characteristics

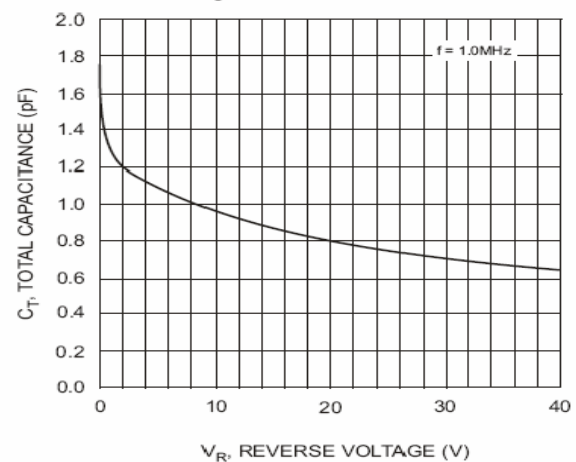


Fig. 4 Typical Capacitance vs. Reverse Voltage

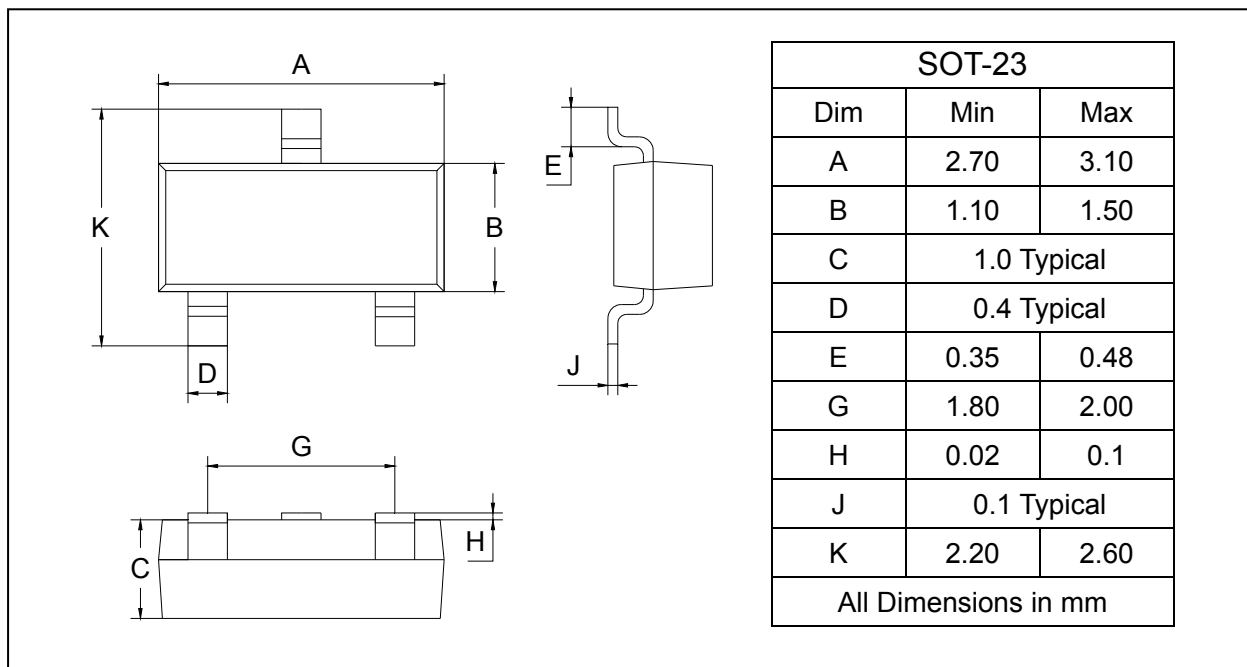
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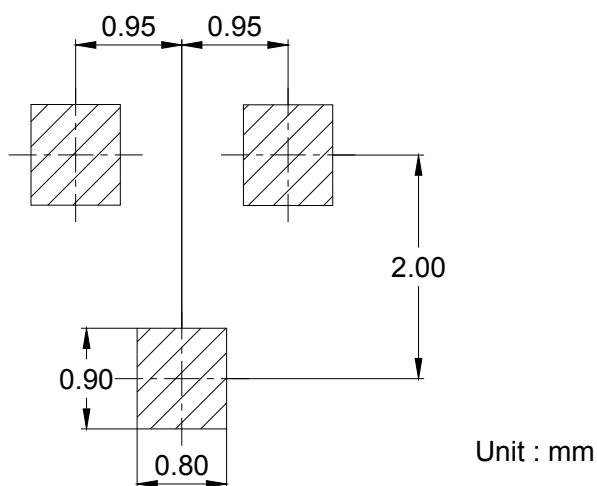
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
MMBD4148A/CA/CC/SE	SOT-23	3000/Tape&Reel