

Features

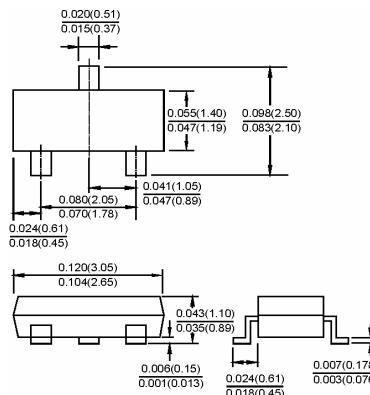
- ◊ Fast switching speed.
- ◊ High conductance.
- ◊ For general purpose switching applications.
- ◊ Surface mount package ideally suited for automatic insertion.

Applications

- ◊ Small signal switching

MMBD4148A/CA/CC/SE

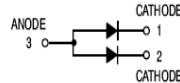
Surface Mount Switching Diode
SOT-23



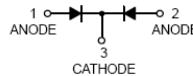
Dimensions in inches and (millimeters)



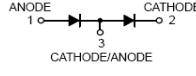
MMBD4148A



MMBD4148CA



MMBD4148CC



MMBD4148SE

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 _{θJA}	357	°C/W
Operating junction temperature	T _J	150	°C
Storage temperature range	T _{STG}	-55-150	°C

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(\text{BR})\text{R}1}$	100			V	$I_R=100\mu\text{A}$
	$V_{(\text{BR})\text{R}2}$	75			V	$I_R=5\mu\text{A}$
Forward voltage	V_F			1	V	$I_F=10\text{mA}$
Reverse current	I_{R1}			25	nA	$V_R=20\text{V}$
	I_{R2}			5	μA	$V_R=75\text{V}$
Diode Capacitance	C_D			4	pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=10\text{mA}, V_R=6\text{V}$ $I_{rr}=0.1*I_{R1}, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified
