

## SOT-23

### Features

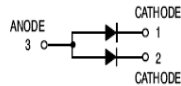
- ✧ Fast switching speed.
- ✧ High conductance.
- ✧ For general purpose switching applications.
- ✧ Surface mount package ideally suited for automatic insertion.

### Applications

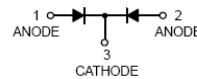
- ✧ Small signal switching



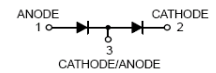
MMBD4148A



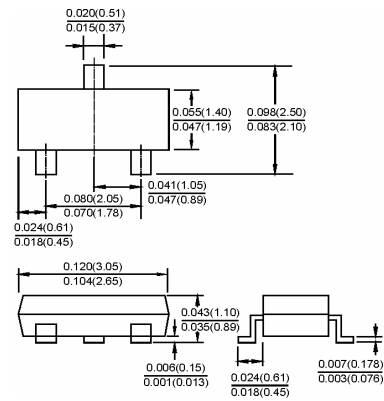
MMBD4148CA



MMBD4148CC



MMBD4148SE



Dimensions in inches and (millimeters)

### Ordering Information

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

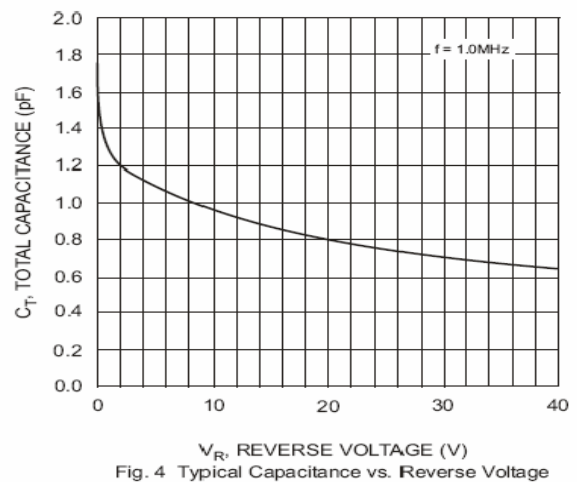
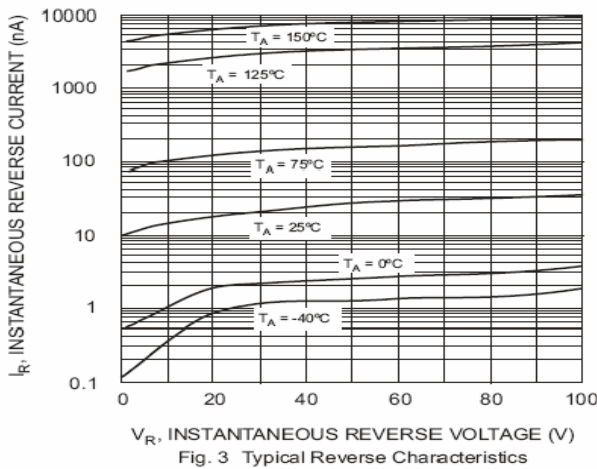
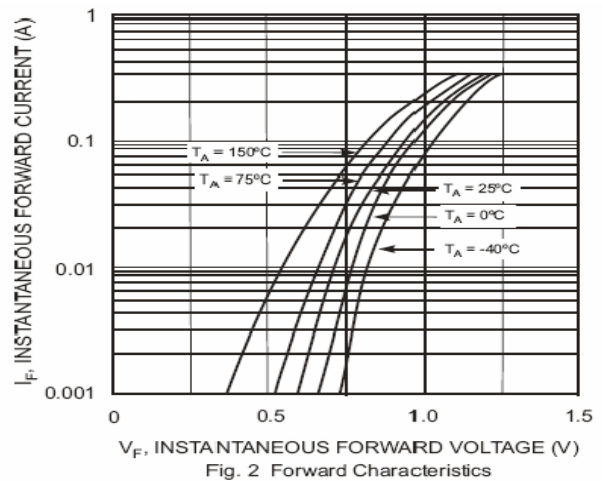
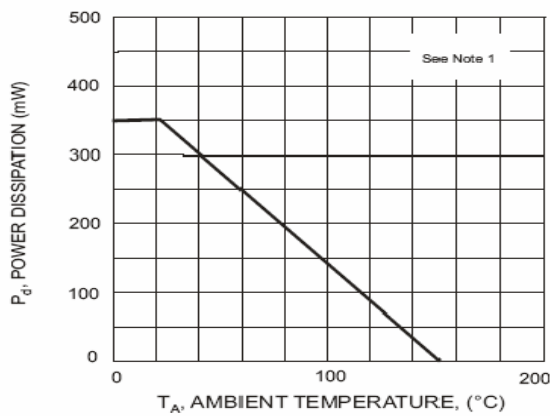
### MAXIMUM RATING @ Ta=25°C unless otherwise specified

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	$T_{STG}$	-55-150	°C

### 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	$\mu A$	$V_R=75V$
Diode Capacitance	$C_D$			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



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOT-23	3000/REEL	90000	40X20X22	5.00	4.00