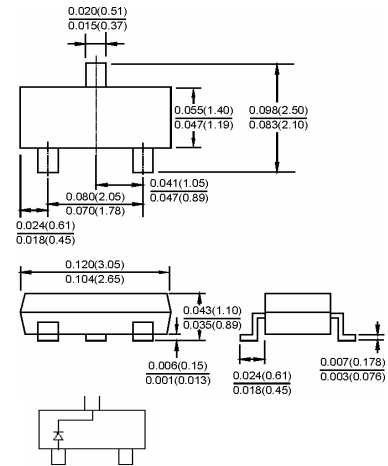

**SOT-23**


Dimensions in inches and (millimeters)

**Features**

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

**Applications**

- ✧ Small signal switching

**Ordering Information**

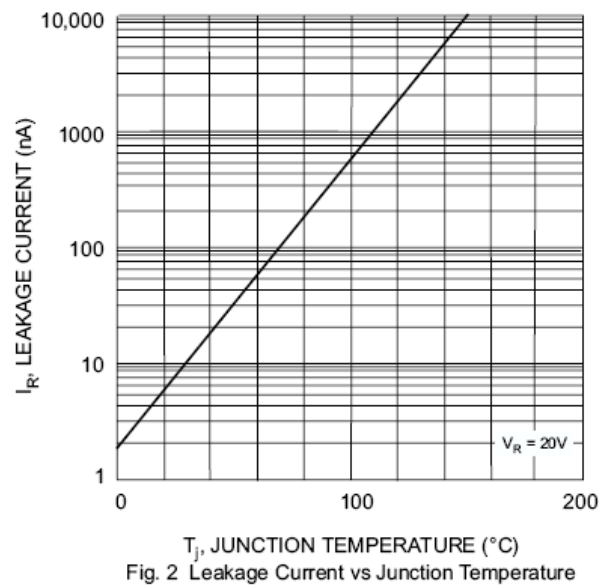
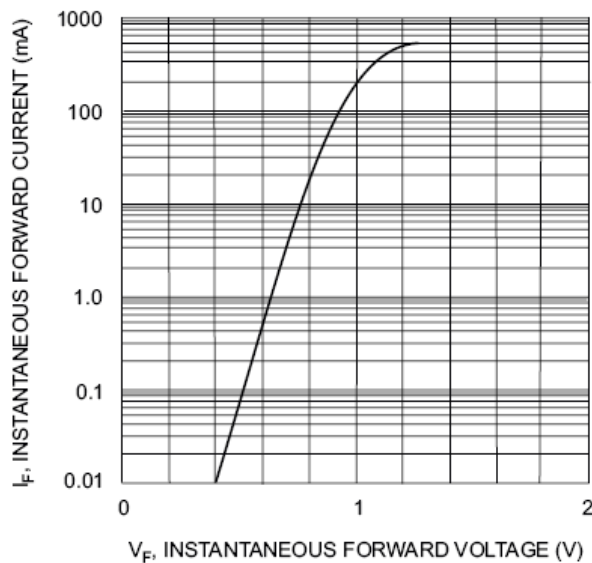
Type No.	Marking	Package Code
MMBD4148	KA2	SOT-23

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

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Reverse Voltage	$V_R$		
Non-repetitive peak reverse voltage	$V_{RM}$	100	V
RMS Reverse voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	$I_{FM}$	300	mA
Average rectified output Current	$I_o$	150	mA
Non-repetitive peak forward surge Current @t=1.0μs @t=1.0s	$I_{FSM}$	2.0 1.0	A
Power Dissipation	$P_d$	350	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	375	°C/W
Operating and storage temperature range	$T_j, T_{STG}$	-65 to 150	°C

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{R(BR)}$	75				$I_R=100\mu A$
Maximum Forward voltage	$V_{FM}$			0.715 0.855 1.0 1.25	V	$I_F=1.0mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$
Reverse current	$I_{R1}$			2.5	$\mu A$	$V_R=75V$
	$I_{R2}$			25	nA	$V_R=20V$
Diode Capacitance	$C_D$			2	pF	$V_R=0V, f=1MHz$
Reverse Recovery Time	$t_{rr}$			4	ns	$I_F=I_R=10mA, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

**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