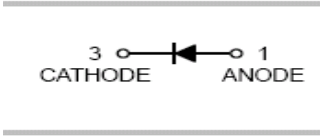
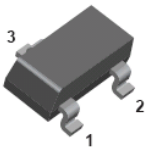


### Features

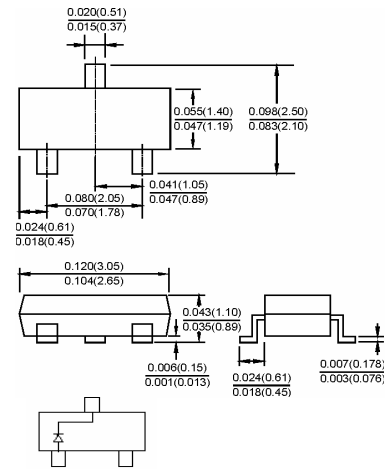
- Fast switching speed.
- High conductance.
- For general purpose switching applications.
- Surface mount package ideally suited for automatic insertion.

### Applications

- Small signal switching



### SOT-23



Dimensions in inches and (millimeters)

### Ordering Information

Type No.	Marking	Package Code
MMBD4148	KA2	SOT-23

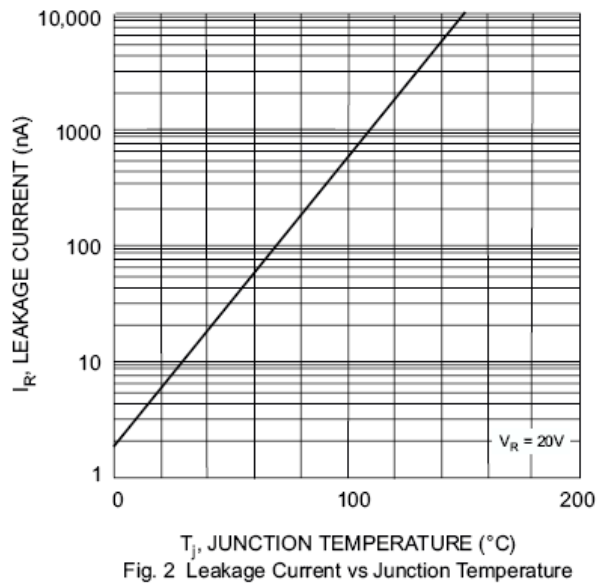
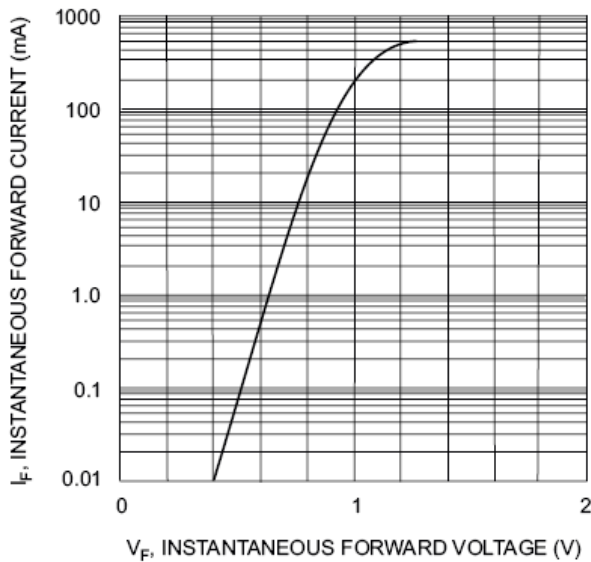
### MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

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 @ $t=1.0\mu\text{s}$ @ $t=1.0\text{s}$	$I_{FSM}$	2.0 1.0	A
Power Dissipation	$P_d$	350	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	375	$^\circ\text{C}/\text{W}$
Operating and storage temperature range	$T_j, T_{STG}$	-65 to 150	$^\circ\text{C}$

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

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

**TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  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