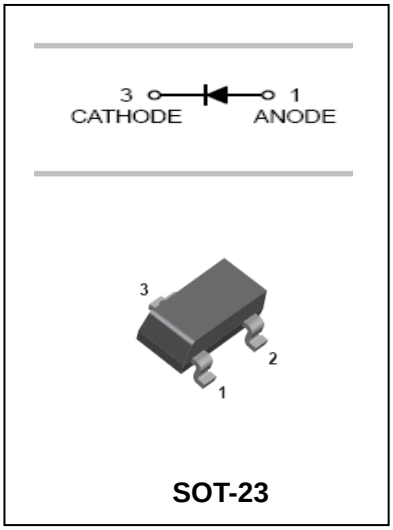
Surface mount switching diode **MMBD4148**

FEATURES

Lead-free

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



SOT-23

APPLICATIONS

- Small signal switching

ORDERING INFORMATION

Type No.	Marking	Package Code
MMBD4148	KA2	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Limits**	**Unit**
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	75	V
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	℃/W
Operating and storage temperature range	T_j,T_{STG}	-65 to 150	℃

Surface mount switching diode **MMBD4148**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{R(BR)}$	75				I_R=100μA
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	μA	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*I_R,R_L=100Ω

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

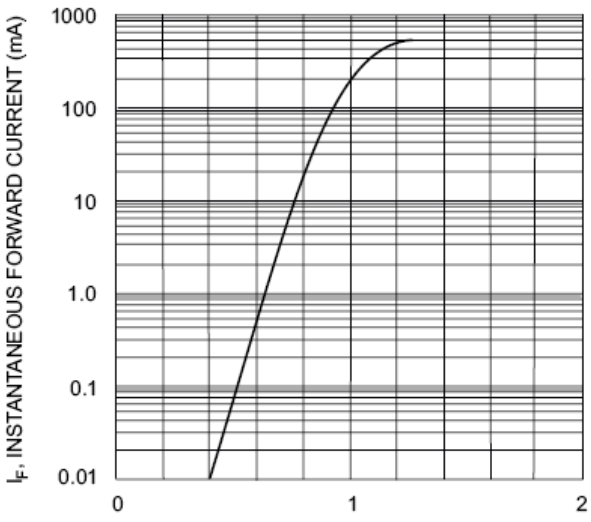


Fig. 1 Forward Characteristics

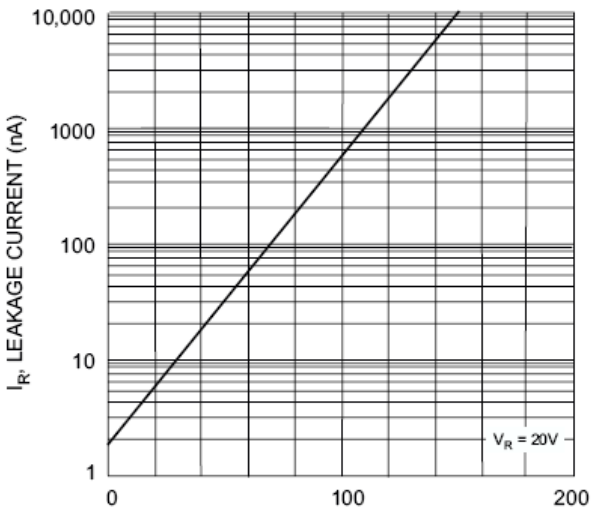
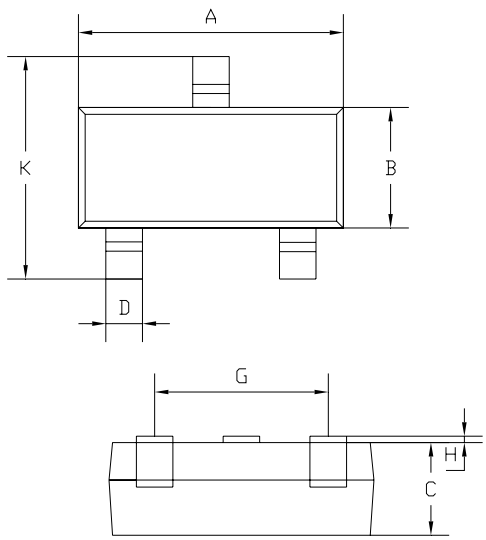


Fig. 2 Leakage Current vs Junction Temperature

Surface mount switching diode **MMBD4148**

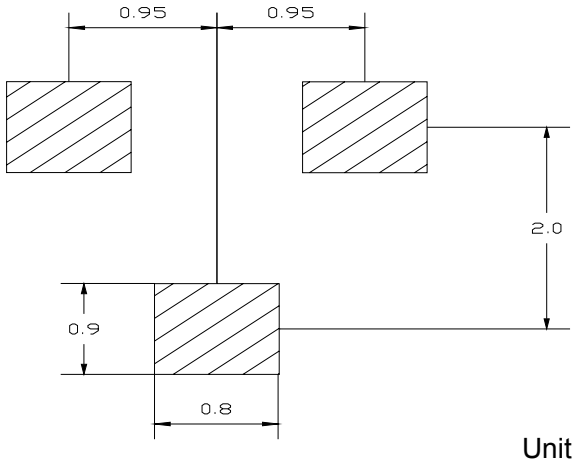
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBD4148	SOT-23	3000/Tape&Reel