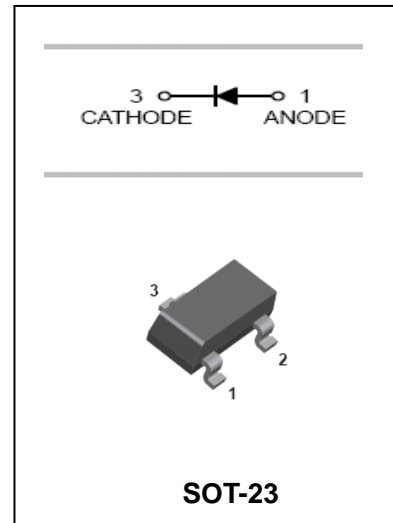


Surface mount switching diode

MMBD4148

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 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	°C/W
Operating and storage temperature range	T_j, T_{STG}	-65 to 150	°C

Surface mount switching diode

MMBD4148

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	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	$I_F=I_R=10mA, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

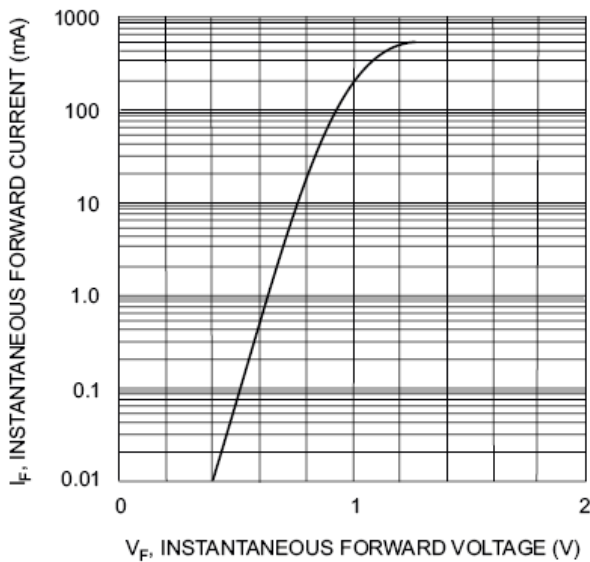


Fig. 1 Forward Characteristics

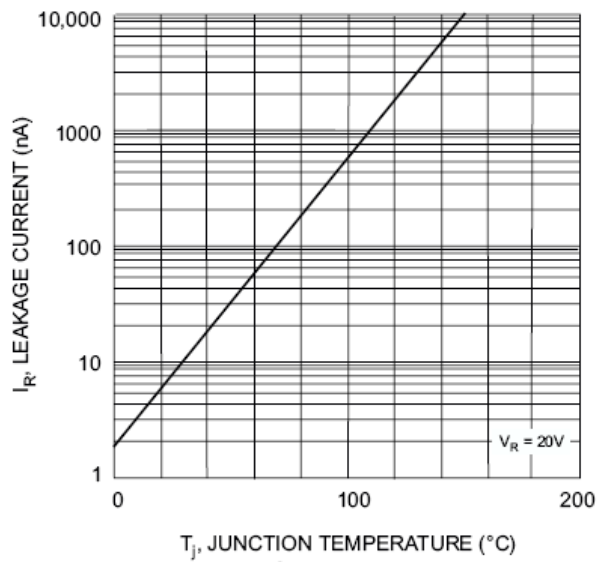


Fig. 2 Leakage Current vs Junction Temperature

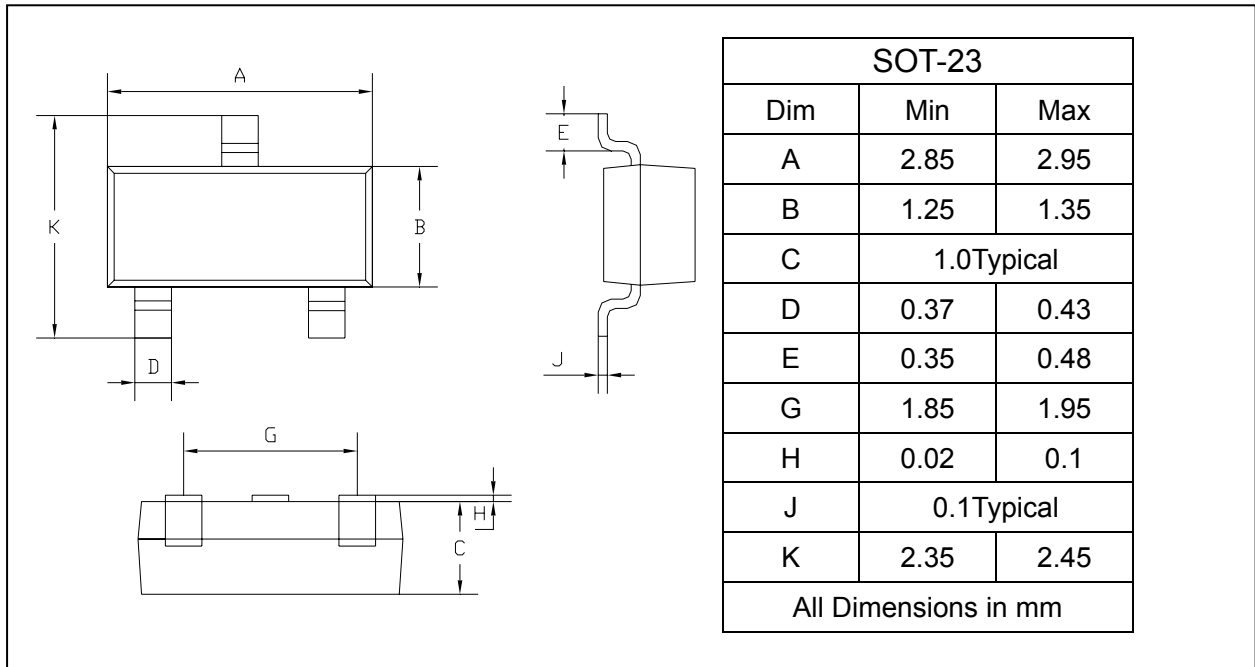
Surface mount switching diode

MMBD4148

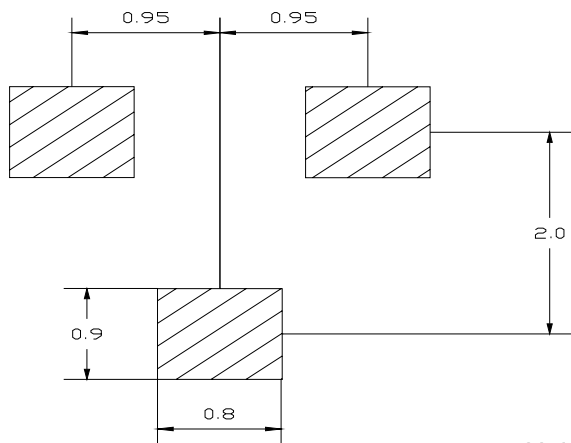
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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

www.s-manuals.com