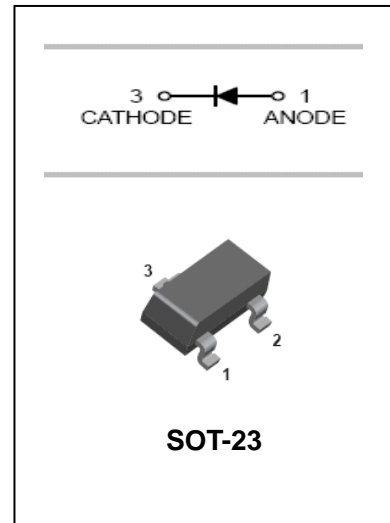


Surface mount switching diode

**MMBD4448**

**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
MMBD4448	KA3	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
Average rectified output Current	$I_o$	250	mA
Non-repetitive peak forward surge Current @t=1.0µs @t=1.0s	$I_{FSM}$	4.0 2.0	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**



Surface mount switching diode

**MMBD4448**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{R(BR)}$	75				$I_R=100\mu A$
Maximum Forward voltage	$V_{FM}$		0.62	0.72 0.855 1.0 1.25	V	$I_F=5.0mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$
Reverse current	$I_{R1}$			2.5	$\mu A$	$V_R=75V$
	$I_{R2}$			25	nA	$V_R=20V$
Junction Capacitance	$C_j$			4	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 @  $T_a=25^\circ C$  unless otherwise specified

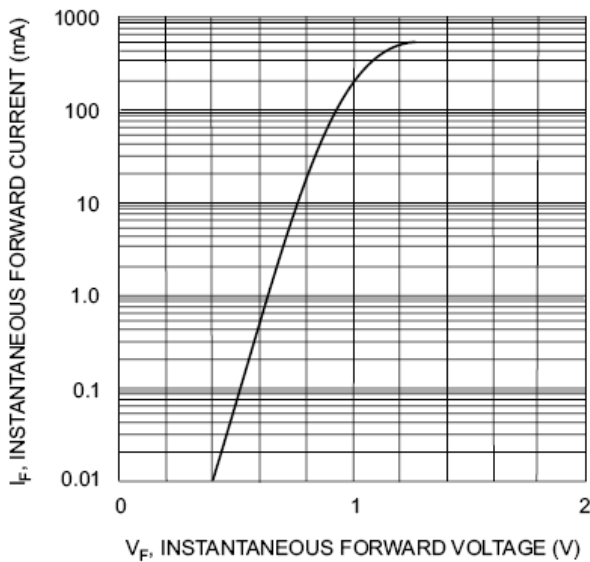


Fig. 1 Forward Characteristics

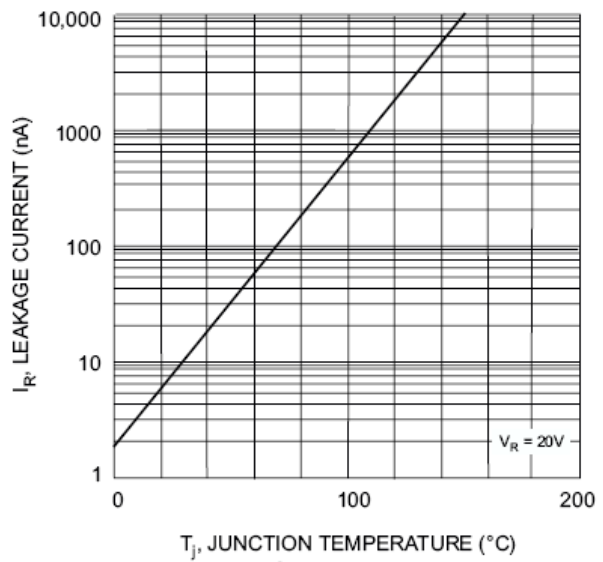


Fig. 2 Leakage Current vs Junction Temperature

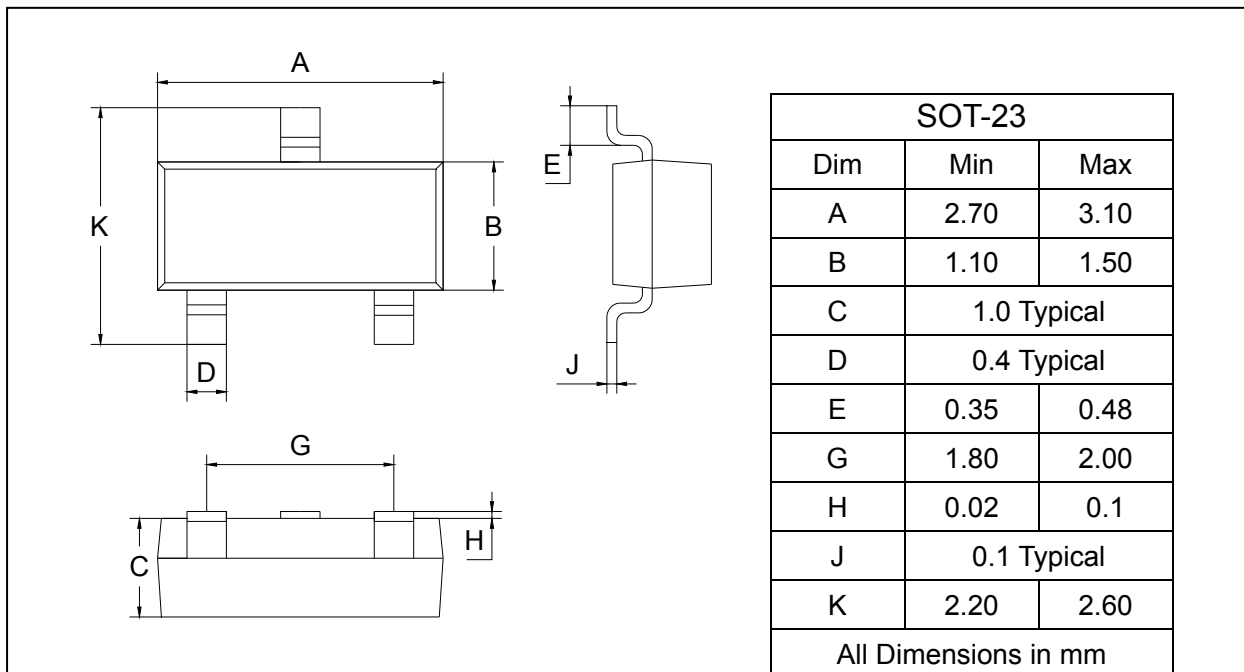
PACKAGE OUTLINE

Surface mount switching diode

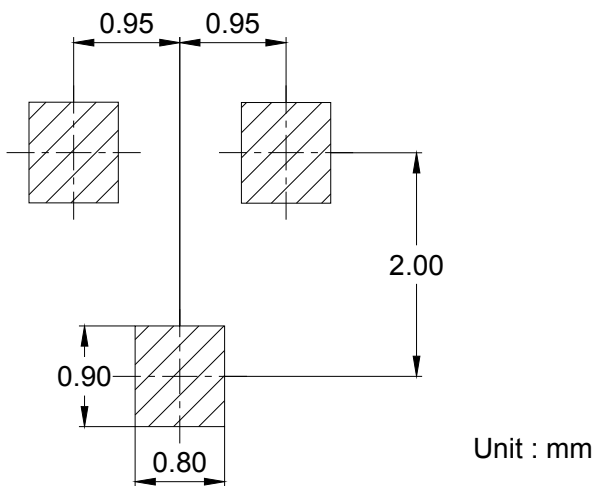
**MMBD4448**

Plastic surface mounted package

SOT-23



**SOLDERING FOOTPRINT**



**PACKAGE INFORMATION**

Device	Package	Shipping
MMBD4448	SOT-23	3000/Tape&Reel