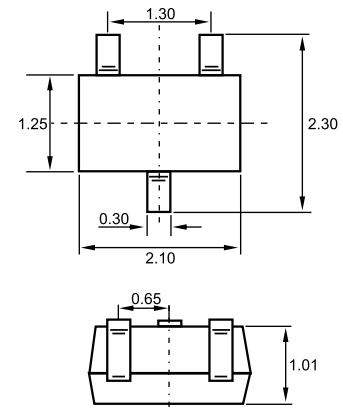




SOT-323



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

- ✧ For general purpose switching applications.

Ordering Information

Type No.	Marking	Package Code
MMBD4448W	KA3	SOT-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	100	V
Diode reverse voltage	V_R	75	V
Forward continuous Current	I_F	500	mA
Average output current	I_O	250	mA
Forward Surge Current	I_{FS}	4.0 2.0	A
	$t=1\mu S$ $t=1.0s$		
Power Dissipation	P_d	200	mW
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-65-+150	°C



ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 100\mu A$	75		V
Reverse voltage leakage current	I_R	$V_R = 75V$ $V_R = 20V$		2.5 25	μA nA
Forward voltage	V_F	$I_F = 5mA$ $I_F = 10mA$ $I_F = 100mA$ $I_F = 150mA$		720 855 1000 1250	mV
Diode capacitance	C_D	$V_R = 0V$ $f = 1MHz$		4	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10mA$ $R_L = 100\Omega$		4	nS

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

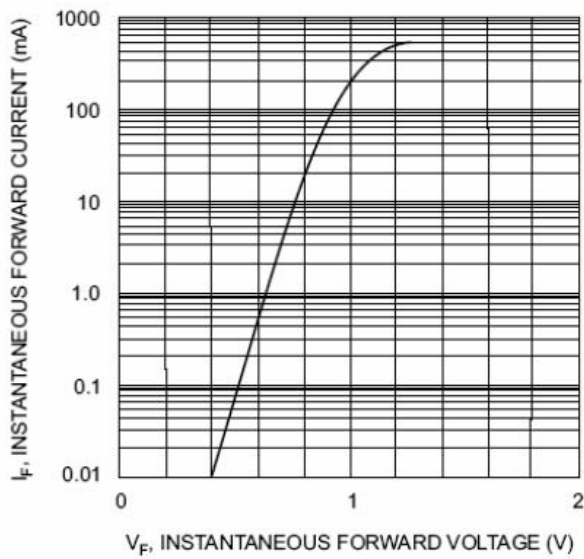


Fig. 1 Forward Characteristics

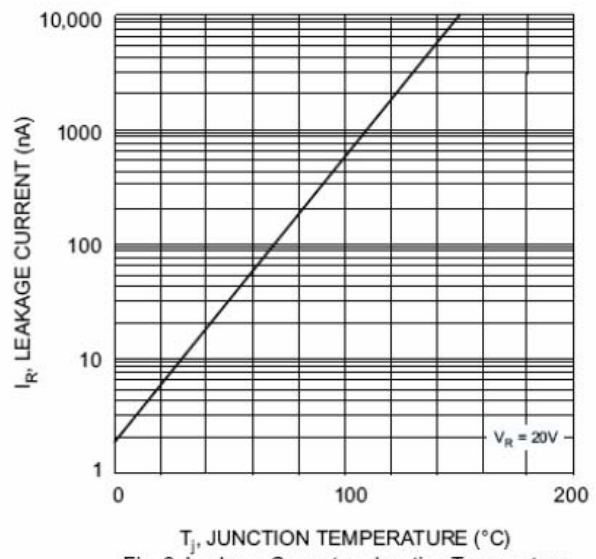


Fig. 2 Leakage Current vs Junction Temperature