



WILLAS



150mA Surface Mount Switching Diode-100V SOT-23 Package

MMBD4448

SOT-23

FEATURES

- * Fast switching Speed.
- * Electrically Identical to Standard JEDEC
- * High Conductance
- * Surface Mount Package Ideally Suited for Automatic Insertion.
- * RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- * **Moisture Sensitivity Level 1**

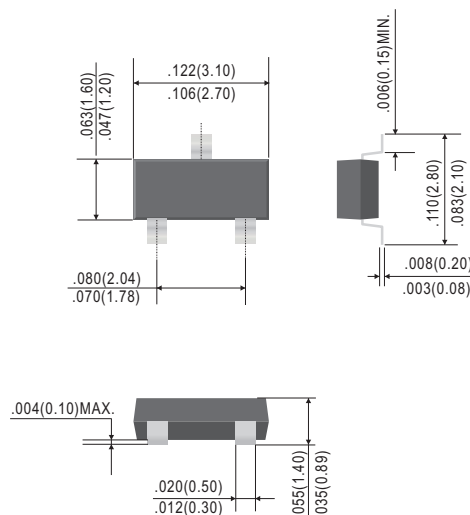
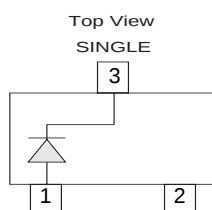
MECHANICAL DATA

Case: SOT-23 plastic case.

Terminals : Solderable per MIL-STD-750, Method 2026

Standard packaging: 8mm tape

Weight: approximately 0.0003 ounces, 0.0084 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

RATINGS	SYMBOL	MMBD4448	UNIT
Marking Code		A3	
Reverse Voltage	V_R	75	Volts
Peak Reverse Voltage	V_{RM}	100	Volts
RMS Voltage	V_{RMS}	50	Volts
Maximum DC Blocking Voltage	V_{DC}	75	Volts
Maximum Average Forward Current	I_{AV}	150	mAmps
Peak Forward Surge Current 1.0us	I_{FSM}	4	Amps
Power Dissipation Derate Above $T_a=25^\circ\text{C}$	P_{TOT}	250	mW
Typical Thermal Resistance	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Typical Junction Capacitance (Note 1)	C_J	4	pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55~+150	$^\circ\text{C}$

Electrical Ratings @ $T_A=25^\circ\text{C}$

CHARACTERISTICS	SYMBOL	MMBD4448	UNIT
Maximum Forward Voltage @ 0.005A DC	V_F	0.72	Volts
@0.1A DC		1.00	
Maximum Average Reverse Current @75V DC	I_R	2.5	μAmps
@25V DC		25	nAmps
Reverse Recovery Time (Note 2)	T_{rr}	4	nsec

Note:

1. C_J at $V_R=0$, $f=1\text{MHz}$

2. From $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $V_R=6\text{Volts}$, $R_L=100\Omega$



WILLAS



**150mA Surface Mount Switching Diode-100V
SOT-23 Package**

MMBD4448

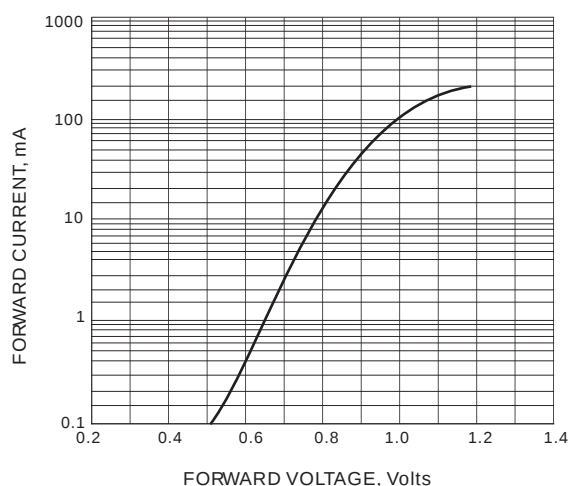


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

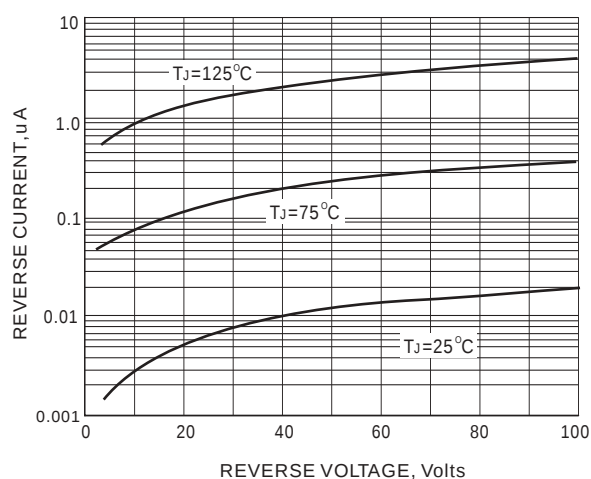


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

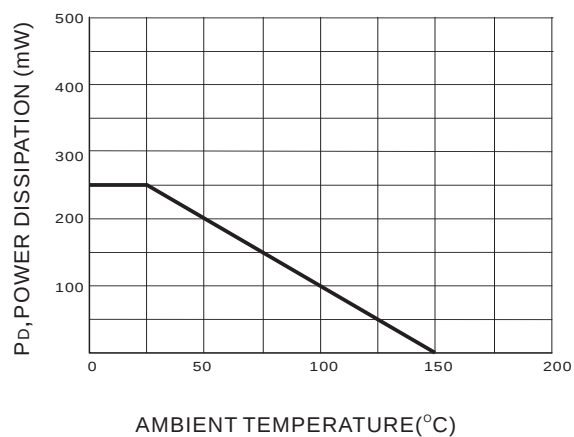


FIG. 3 POWER DERATING CURVE