

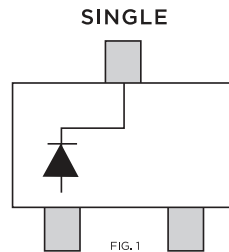
PART NUMBER	PACKAGE	VOLTAGE	POWER	CIRCUIT CONFIGURATION
MMBD4148-□VL E = 7" Embossed T&R (3,000) U = 13" Embossed T&R (12,000)	SOT-23	100V	250mW	SINGLE

FEATURES:

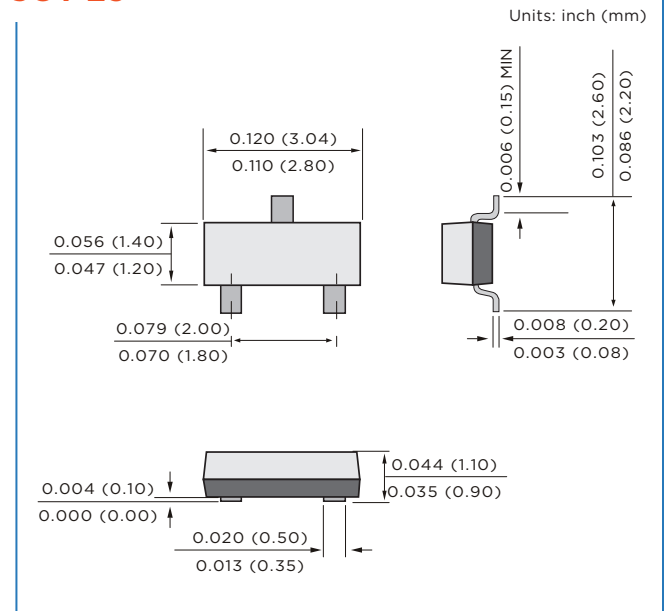
- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion

MECHANICAL DATA:

- Case: SOT-23 plastic case.
- Terminals: Solderable per MIL-STD-750, Method 2026
- Standard packaging: 8mm tape
- Approx weight: 0.0003 ounces, 0.0084 grams
- Marking Code: A2



SOT-23



MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

(T_J=25°C unless otherwise noted).

RATING	SYMBOL	VALUE	UNITS
Reverse Voltage	V _R	75	V
Peak Reverse Voltage	V _{RM}	100	V
RMS Voltage	V _{RMS}	50	V
Maximum DC Blocking Voltage	V _{DC}	75	V
Maximum Average Forward Current at T _a =25°C	I _{AV}	150	mA
Peak Forward Surge Current, 1.0us	I _{FSM}	4	A
Power Dissipation Derate Above 25°C	P _{TOT}	250	mW
Maximum Forward Voltage	V _F	0.715 @ 0.001A 0.855 @ 0.01A 1.0 @ 0.05A 1.25 @ 0.15A	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J = 25°C	I _R	0.025 @ 20V 2.5 @ 75V	µA
Junction Capacitance (Notes 1)	C _J	1.5	pF
Max. Reverse Recovery (Notes 2)	T _{RR}	4.0	ns
Typical Thermal Resistance	R _{θJA}	357	°C / W
Storage Temperature Range	T _J	-55 to +150	°C

NOTES:

1. C_J at V_R=0, f=1MHz
2. From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω

ENVIRONMENTAL INFORMATION

RoHS Status	10 of 10 Compliant
REACH Status	Compliant
Halogen Status	Halogen Free
Conflict Mineral Status	Conflict Mineral Free
Moisture Sensitivity Level (MSL)	1



GRAPHS

Fig.1 Typical Forward Characteristics

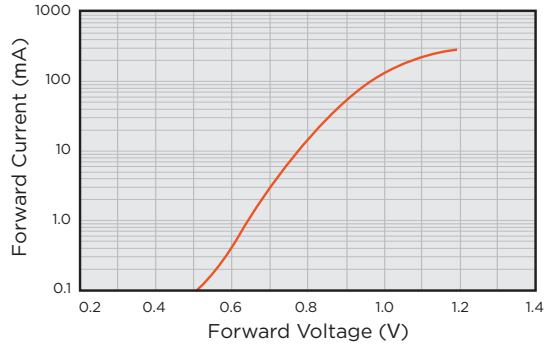


Fig.2 Typical Reverse Characteristics

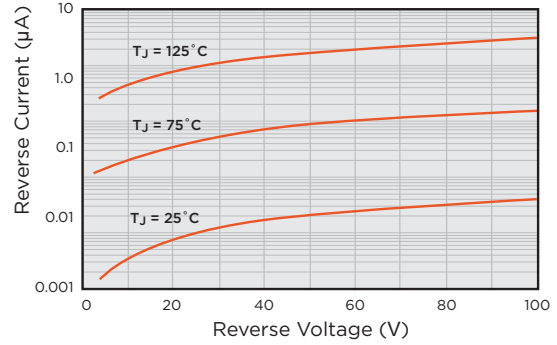
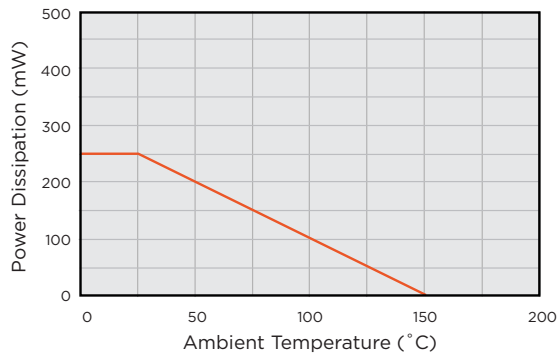


Fig.3 Power Derating Curve



MOUNTING PAD LAYOUT

Units: inch (mm)

