



## SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volt POWER 250mWatt

#### **FEATURES**

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion
- Acquire quality system certificate: TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

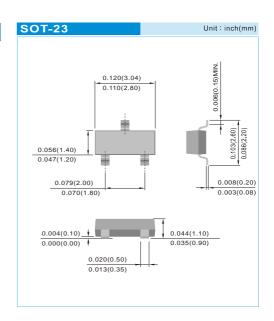
### **MECHANICAL DATA**

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



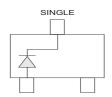
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TJ = 25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Marking Code		A2	
Reverse Voltage	VR	75	V
Peak Reverse Voltage	Vrm	100	V
RMS Voltage	Vrms	50	V
Maximum DC Blocking Voltage	Vdc	75	V
Maximum Average Forward Current at TA=25°C	lav	150	mA
Peak Forward Surge Current, 1μs	IFSM	4	А
Power Dissipation Derate Above 25°C	Ртот	250	mW
Maximum Forward Voltage	VF	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 <sub>J</sub> =25°C	IR	0.025@20V 2.5@75V	μА
Junction Capacitance (Notes1)	Сı	1.5	pF
Maximum Reverse Recovery Time (Notes2)	Trr	4.0	ns
Typical Thermal Resistance	RөJA	357	°C / W
Storage Temperature Range	TJ	-55 to +150	°C

#### NOTE:

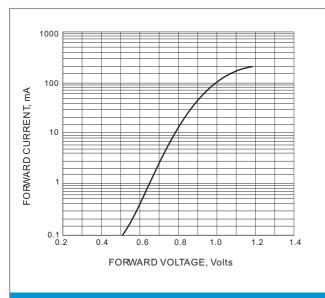
1. CJ at VR=0, f=1MHZ

2.From IF=10mA to IR=1mA, VR=6Volts, RL=100 $\Omega$ 









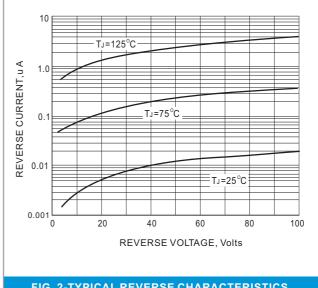


FIG. 1-TYPICAL FORWARD CHARACTERISTIC



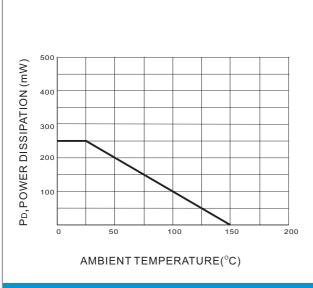
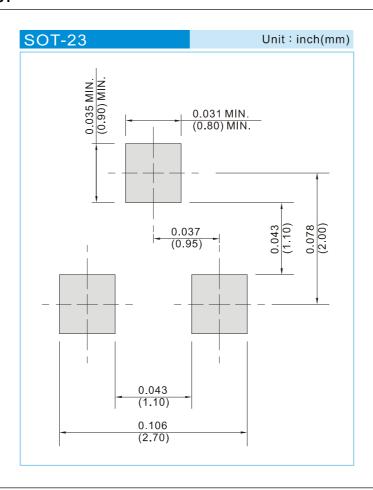


FIG. 3 POWER DERATING CURVE





## **MOUNTING PAD LAYOUT**



## **ORDER INFORMATION**

• Packing information

T/R - 12K per 13" plastic Reel

T/R - 3K per 7" plastic Reel





# Part No\_packing code\_Version

MMBD4148-AU\_R1\_000A1 MMBD4148-AU\_R2\_000A1

# For example:



Packing Code XX			Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			





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