



1N4148W

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volt **POWER** 410mWatt

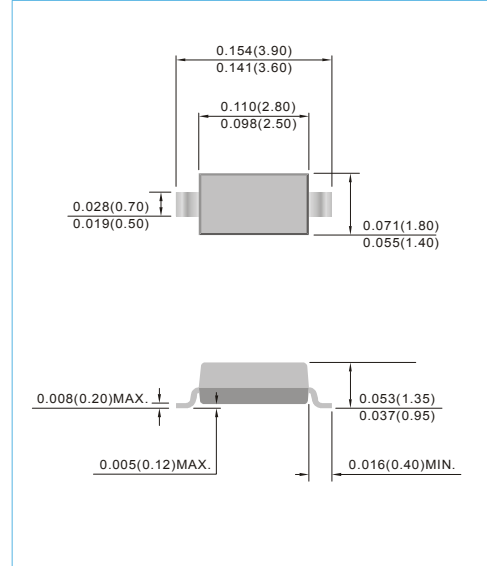
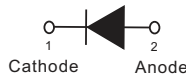
SOD-123 Unit : inch(mm)

FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: SOD-123 plastic case.
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounce, 0.0103 gram
- Marking Code: A2



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

PARAMETER	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 _{F(AV)}	200	mA
Peak Forward Surge Current, 0.001ms	I _{FSM}	4	A
Power Dissipation Derate Above 25°C	P _{TOT}	410	mW
Maximum Forward Voltage	V _F	0.715@1mA 0.855@10mA 1@50mA 1.25@150mA	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
Maximum Reverse Recovery Time (Notes 2)	t _{rr}	4	ns
Typical Thermal Resistance (Notes 3)	R _{θJA} R _{θJC} R _{θJL}	450 257 329	°C / W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

NOTE :

- 1.CJ at V_R=0, f=1MHZ
- 2.From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω
- 3.Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.



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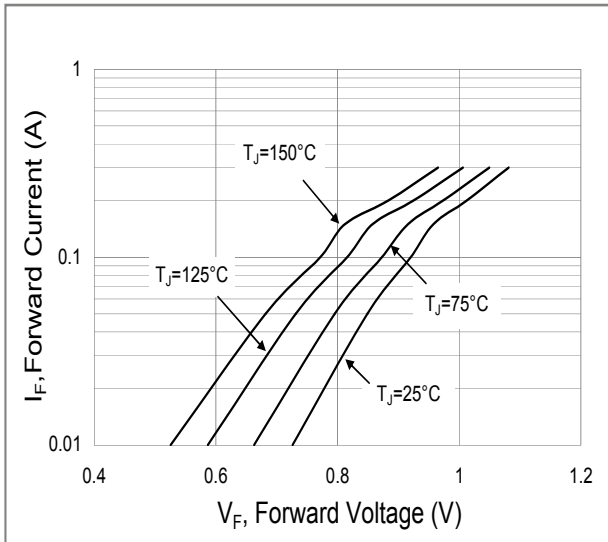


Fig.1 Typical Forward Characteristics

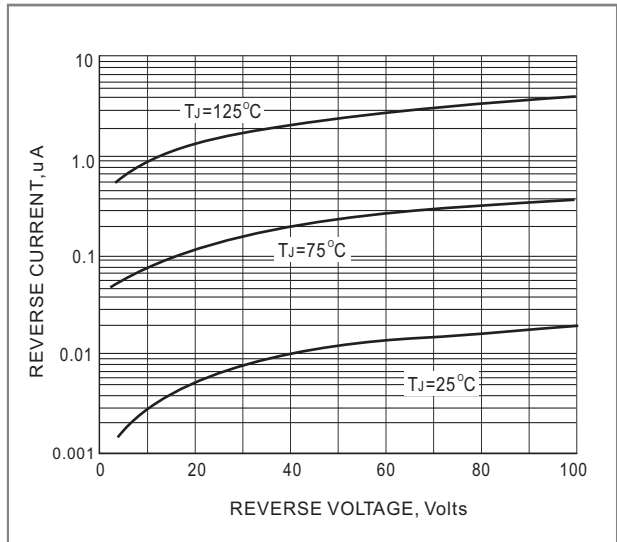


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

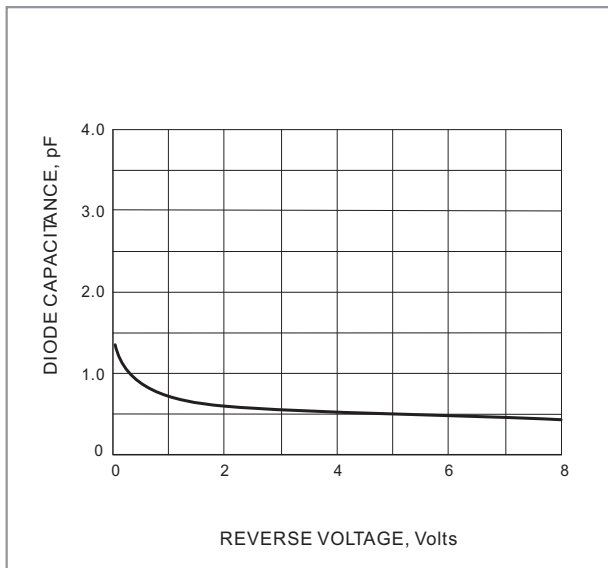


FIG. 3 TYPICAL JUNCTION CAPACITANCE

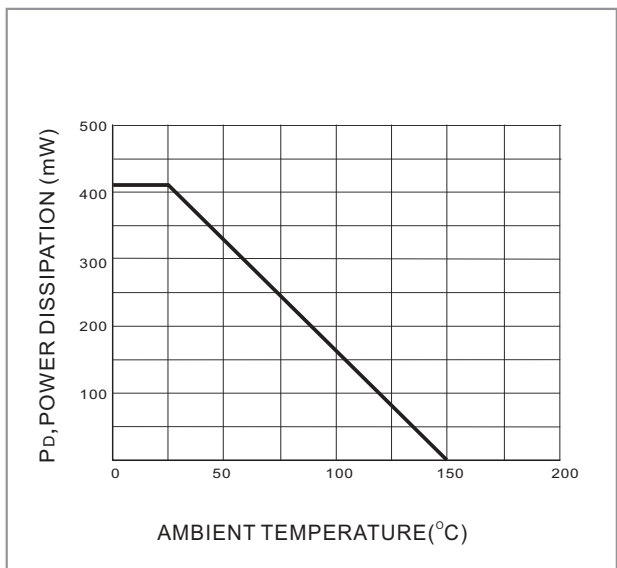
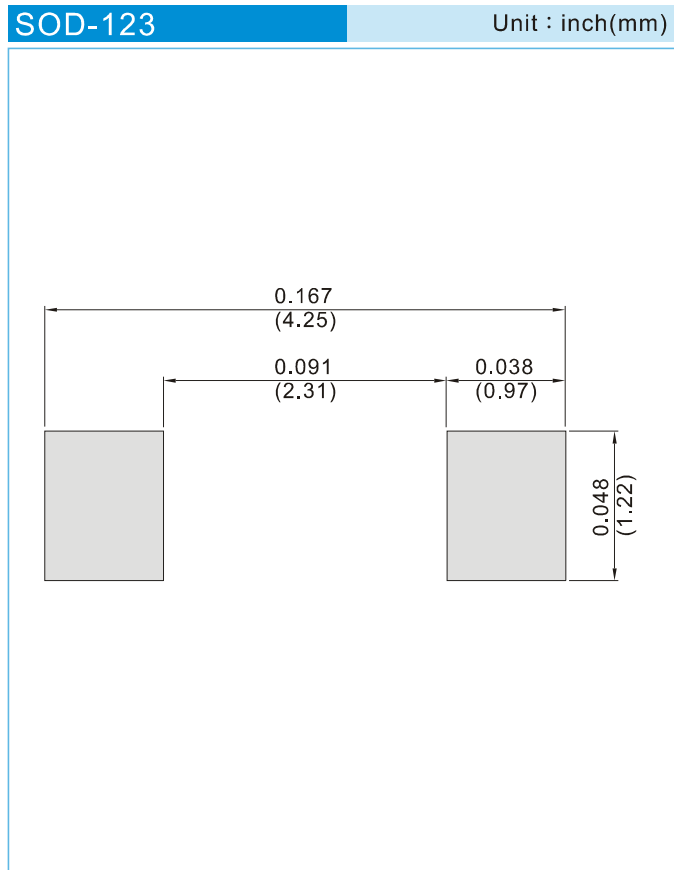


FIG. 4 POWER DERATING CURVE



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 10K per 13" plastic Reel
T/R - 3K per 7" plastic Reel



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Part No_packing code_Version

1N4148W_R1_00001

1N4148W_R2_00001

For example :

RB500V-40 R2 00001



Packing Code XX				Version Code XXXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	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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