



1N5391 SERIES

PLASTIC SILICON RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 1.5 Amperes

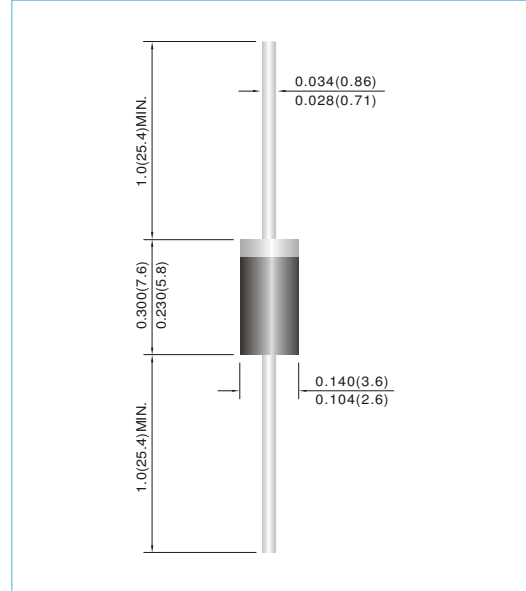
DO-15 Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage.
- Lead free in comply with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Molded plastic, DO-15
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.397 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz, Single phase, half wave, For capacitive load, derate current by 20%

PARAMETER	SYMBOL	1N5391	1N5392	1N5393	1N5394	1N5395	1N5396	1N5397	1N5398	1N5399	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at $T_A=60^\circ\text{C}$	$I_{F(AV)}$	1.5									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50									A
Maximum Forward Voltage at 1.5A	V_F	1.4									V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$	I_R	1 500									μA
Typical Junction Capacitance (Notes 1)	C_J	25									pF
Typical Thermal Resistance (Notes 2)	$R_{\theta JA}$ $R_{\theta JL}$	45 28									$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150									$^\circ\text{C}$

NOTES:1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC

2. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted



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RATING AND CHARACTERISTIC CURVES

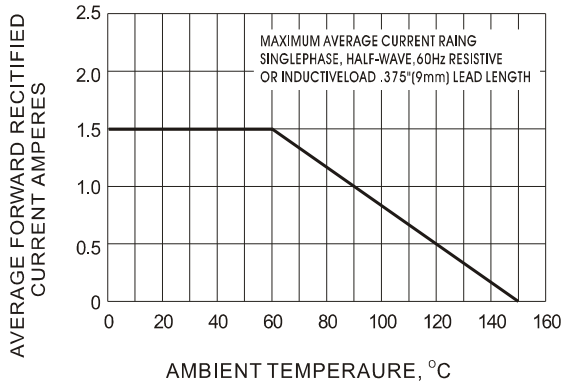


Fig.1- FORWARD CURRENT DERATING CURVE

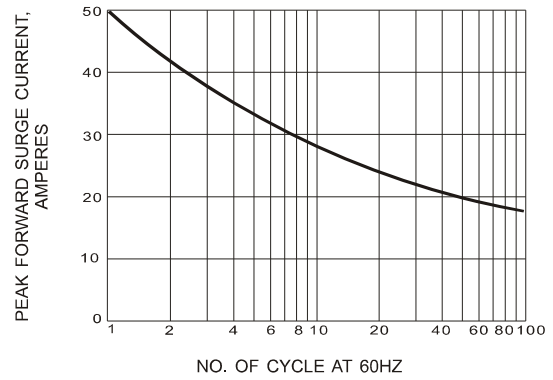


Fig.2- MAXIMUM OVERLOAD SURGE CURRENT

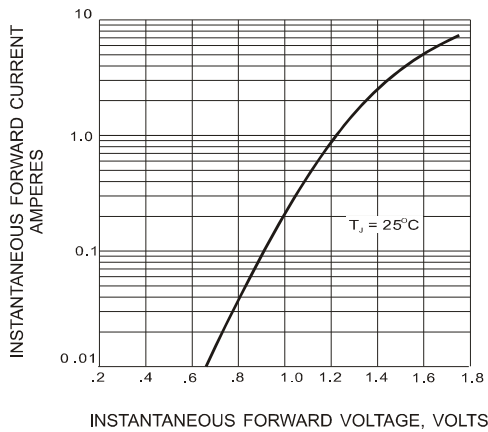


Fig.3- TYPICAL FORWARD CHARACTERISTIC

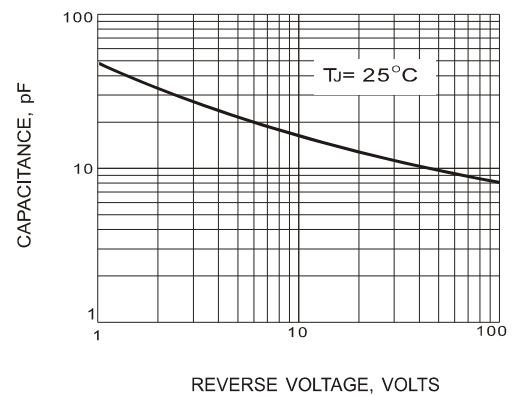


Fig.4- TYPICAL JUNCTION CAPACITANCE

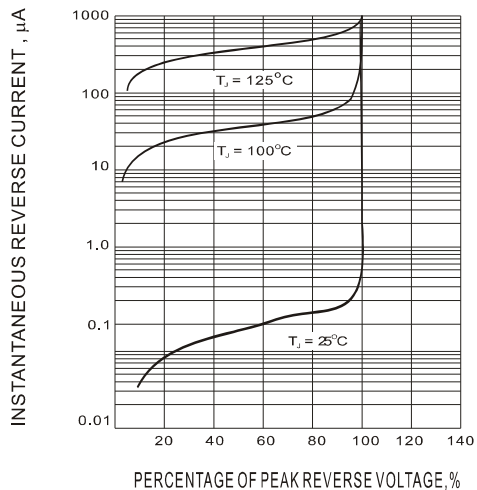


Fig.5- TYPICAL REVERSE CHARACTERISTIC



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Part No_packing code_Version

1N5391_AY_00001
 1N5391_AY_10001
 1N5391_B0_00001
 1N5391_B0_10001
 1N5391_R2_00001
 1N5391_R2_10001

For example :

RB500V-40 **R2** **00001**



Packing Code XX				Version Code XXXXX		
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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