



## SILICON RECTIFIERS

## **FEATURES**

- · Low cost
- · High current capability
- · Plastic package has Underwriters Laboratory Flammability Classification 94V-O ctilizing Flame Retardant Epoxy Molding Compound.
- $\cdot$  1.5 ampere operation at  $T_L$ =70 with no thermal runaway.
- · Exceeds environmental standards of MIL-S-19500/228
- · Low leakage.

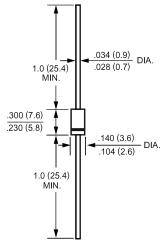
## **MECHANICAL DATA**

Case: Molded plastic, DO-15

Terminals: Plated axial leads, solderable per MIL-STD-202, method 208 guaranteed Polarity: Color band denotes cathode end

Mounting position: Any Weight: 0.015ounce, 0.4gram

# DO-15



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	Symbols	1N5391	1N5392	1N5393	1N5394	1N5395	1N5396	1N5397	1N5398	1N5399	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	500	600	800	1000	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at T <sub>A</sub> =75	I <sub>(AV)</sub>	1.5									Amp
Peak Forward Surge Current,											
8.3ms single half-sine-wave	$I_{FSM}$	I <sub>FSM</sub> 50									Amp
superimposed on rated load (JEDEC method)											
Maximum Forward Voltage at 1.5A DC and 25	$V_{\rm F}$	1.1									Volts
Maximum Reverse Current at T <sub>A</sub> =25		5.0									
at Rated DC Blocking Voltage T <sub>A</sub> =100	I <sub>R</sub> 500									uAmp	
Typical Junction Capacitance (Note 1)	$C_{J}$	20									pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50									/W
Operating Junction Temperature Range	$T_{ m J}$	-55 to +125									
Storage Temperature Range	Tstg	-55 to +125									

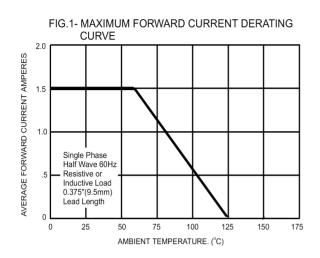
## **NOTES:**

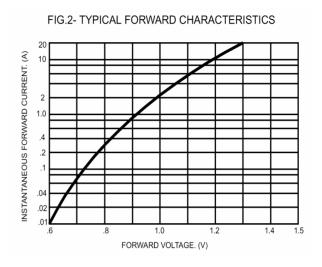
- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance From Junction to Ambient 0.375" (9.5mm) lead length P.C.B. Mounted.

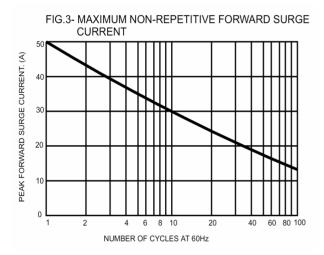


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#### RATINGS AND CHARACTERISTIC CURVES







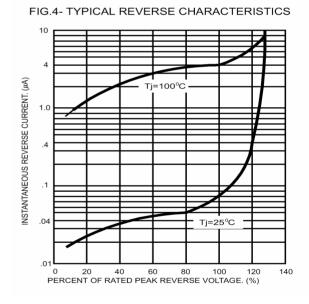


FIG.5- TYPICAL JUNCTION CAPACITANCE

