1N539X SERIES

GENERAL PURPOSE PLASTIC SILICON RECTIFIER

产品规格确认书

1N5391 THRU 1N5399

GENERAL PURPOSE PLASTIC SILICON RECTIFIER

康 比 電 子
HORNBY ELECTRONIC

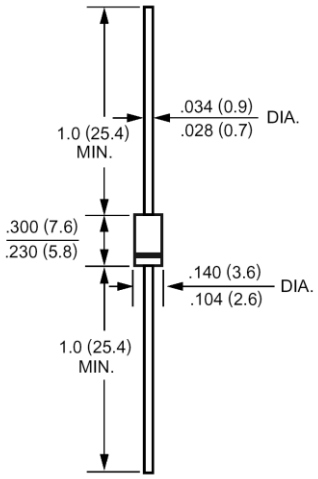
REVERSE VOLTAGE: **50 to 1000 VOLTS**

FORWARD CURRENT: **1.5 AMPERES**

FEATURES

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

DO-15



Dimensions in inches and (millimeters)

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

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60H_Z, 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_{RRM}	50	100	200	300	400	500	600	800	1000	**Volts**
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	**Volts**
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	**Volts**
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at T_A=75℃	$I_{(AV)}$	1.5									**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50									**Amp**
Maximum Forward Voltage at 1.5A DC and 25℃	V_F	1.4									**Volts**
Maximum Reverse Current at T_A=25℃	I_R	5.0									**uAmp**
at Rated DC Blocking Voltage T_A=100℃		500									
Typical Junction Capacitance (Note 1)	C_J	20									**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50									**℃/W**
Operating Junction Temperature Range	T_J	-55 to +150									**℃**
Storage Temperature Range	Tstg	-55 to +150									**℃**

NOTES:

1- Measured at 1 MH_Z 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.1- MAXIMUM FORWARD CURRENT DERATING CURVE

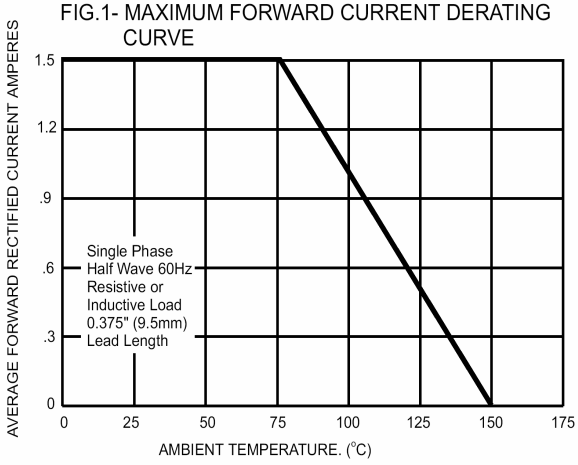

FIG.2- TYPICAL FORWARD CHARACTERISTICS

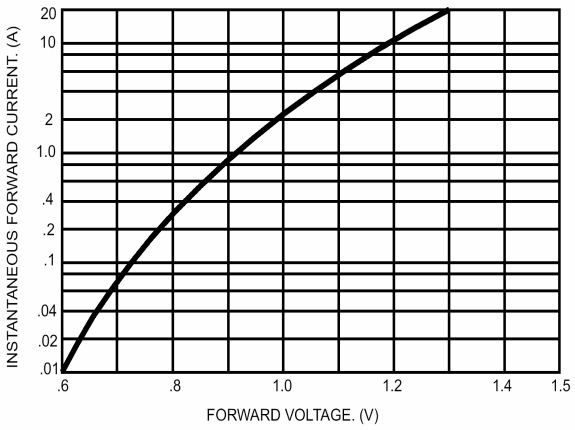

FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

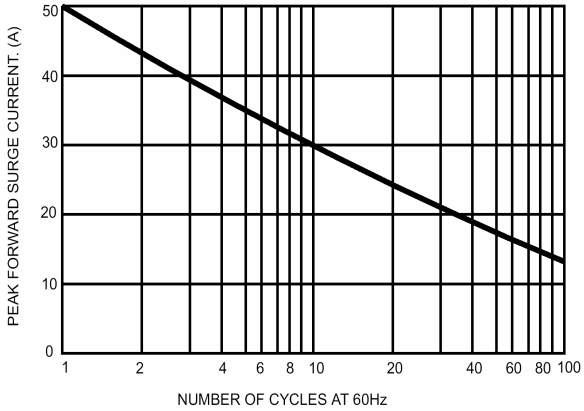

FIG.4- TYPICAL REVERSE CHARACTERISTICS

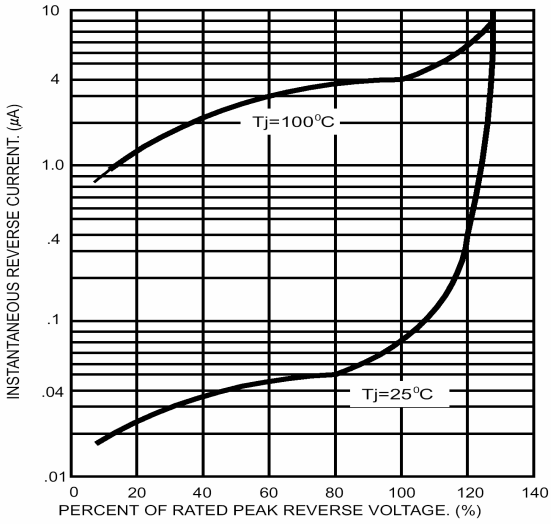

FIG.5- TYPICAL JUNCTION CAPACITANCE