GENERAL PURPOSE PLASTIC SILICON RECTIFIER Reverse Voltage - 50 to 1000 V Forward Current - 1.5 A

Features

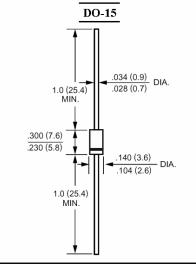
- · High current capability
- Low leakage current
- Low cost

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



Dimensions in inches and (millimeters)

Absolute Maximum Ratings and Characteristics

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

Parameter	Symbols	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	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 Rectified Current 0.375"(9.5 mm) Lead Length at $T_A = 75$ °C	I _(AV)	1.5									Α
Peak Forward Surge Current, 8.3 ms Single Half-sine-wave Superimposed on rated load (JEDEC method)	I _{FSM}	50									А
Maximum Forward Voltage at 1.5 A DC	V _F	1.4									V
Maximum Reverse Current $T_A = 25$ °C at Rated DC Blocking Voltage $T_A = 100$ °C	I _R	5 500									μΑ
Typical Junction Capacitance 1)	CJ	20									pF
Typical Thermal Resistance 2)	$R_{\theta JA}$	50									°C/W
Operating Junction Temperature Range	TJ	-55 to +150									°C
Storage Temperature Range	T _{stg}	-55 to +150									°C

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 VDC.

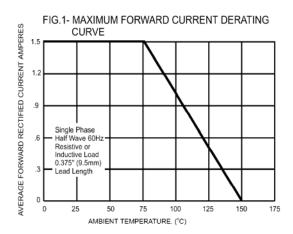
²⁾ Thermal resistance junction to ambient 0.375" (9.5 mm) lead length P.C.B mounted.

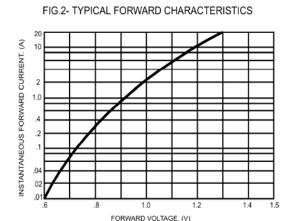


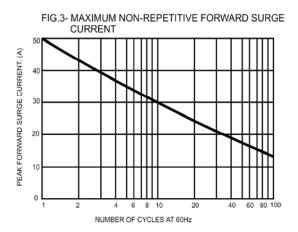












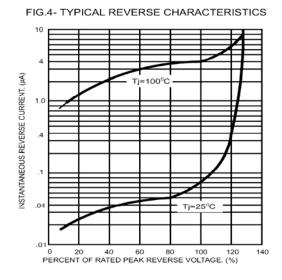
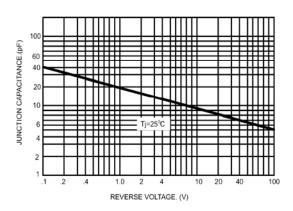


FIG.5- TYPICAL JUNCTION CAPACITANCE













Dated: 25/04/2006 H