

1N5391S - 1N5399S

1.5 AMPS. Silicon Rectifiers

DO-41

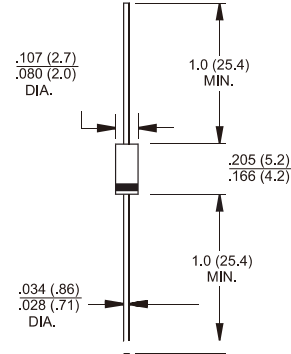


Features

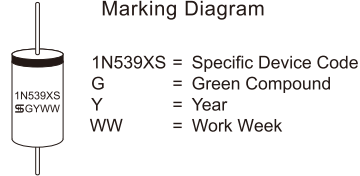
- ◇ High current capability, Low VF.
- ◇ High reliability & Current capability.
- ◇ High surge current capability.
- ◇ Low power loss, high efficiency.
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- ◇ Cases: Molded plastic DO-41
- ◇ Epoxy: UL 94V-O rate flame retardant
- ◇ Lead: Pure tin plated, lead free, solderable per MIL-STD-202,
- ◇ Polarity: Color band denotes cathode.
- ◇ High temperature soldering guaranteed: 260oC/10 seconds
- ◇ Weight: 0.40 grams



Dimensions in inches and (millimeters)
Marking Diagram



Maximum Ratings and Electrical Characteristics

Rating 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%

Type Number	Symbol	1N5391S	1N5392S	1N5393S	1N5395S	1N5397S	1N5398S	1N5399S	Units	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @TL = 90°C	$I_{F(AV)}$	1.5							A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50							A	
Maximum Instantaneous Forward Voltage @ 1.5A	V_F	1.1	1.0						V	
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage (Note 1) @ $T_A=125^\circ\text{C}$	I_R				5.0	50			μA	
Typical Junction Capacitance (Note 2)	C_j	30							pF	
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$ $R_{\theta JC}$				65	25	22			$^\circ\text{C/W}$
Operating Temperature Range	T_J	-65 to +125							$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ\text{C}$	

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle.
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
3. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.

RATINGS AND CHARACTERISTIC CURVES (1N5391S THRU 1N5399S)

