

### DO-41

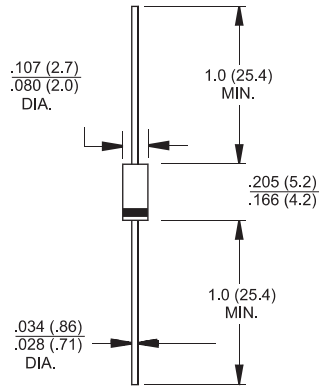


### Features

- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ Low power loss

### Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Polarity: Color band denotes cathode
- ✧ High temperature soldering guaranteed:  
260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 0.35 gram



Dimensions in inches and (millimeters)

### 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	1N 5391S	1N 5392S	1N 5393S	1N 5395S	1N 5397S	1N 5398S	1N 5399S	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 @ $T_A = 75^\circ C$	$I_{(AV)}$	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 @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$					5.0	50		uA uA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @ $T_A=75^\circ C$	$HT_{IR}$					30			uA
Typical Junction Capacitance ( Note 1 )	$C_j$					30			pF
Typical Thermal Resistance ( Note 2 )	$R_{\theta JA}$					50			°C/W
Operating Temperature Range	$T_J$					-65 to +125			°C
Storage Temperature Range	$T_{STG}$					-65 to +150			°C

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

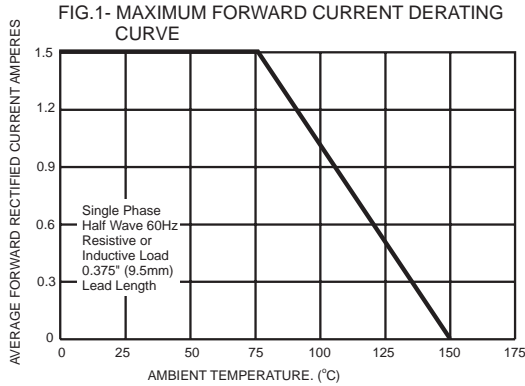
2. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.



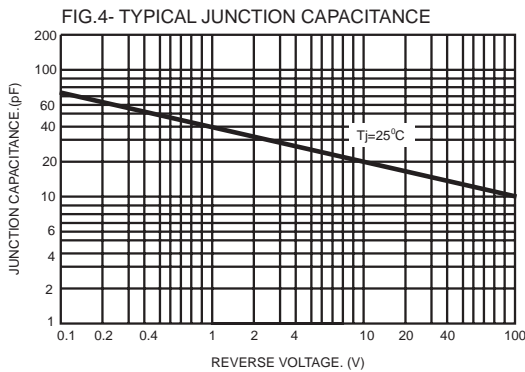
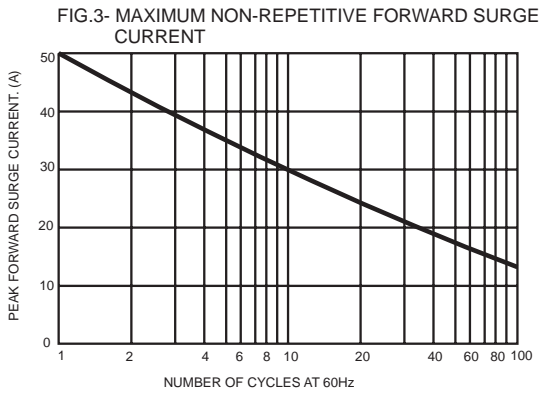
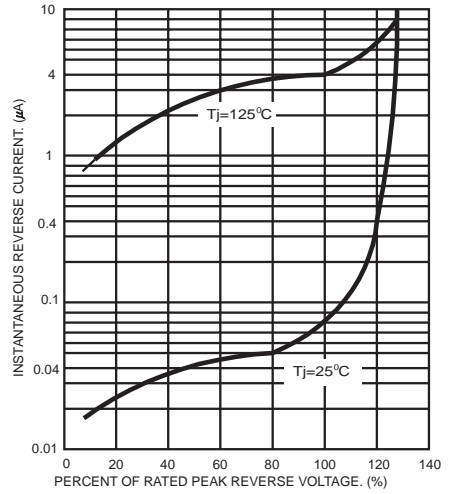
# 1N5391S-1N5399S

## 1.5AMP. Silicon Rectifiers

### RATINGS AND CHARACTERISTIC CURVES (1N5391S THRU 1N5399S)



**FIG.2- TYPICAL REVERSE CHARACTERISTICS**



**FIG.5- TYPICAL FORWARD CHARACTERISTICS**

