

# 1.5 A Silicon Rectifiers

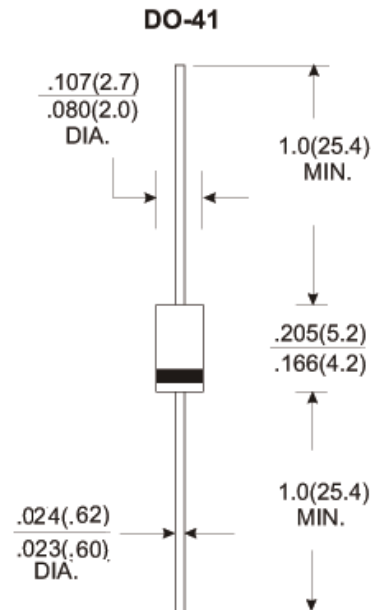
## 1N5391 THRU 1N5399 50 to 1000 V 1.5A

### FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

### MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed:  
250°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg)tension
- Weight: 0.4 gram



### Maximum Ratings and Electrical Characteristics

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

Type Number	Symbols	1N5391	1N5392	1N5393	1N5394	1N5395	1N5397	1N5398	1N5399	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length @ T =75°C	I <sub>(AV)</sub>	1.5								Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50								Amp
Maximum instantaneous Forward Voltage @ 1.5A	V <sub>F</sub>	1.1								Volts
Maximum Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5.0 50								uAmp
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	15								pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	50								°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range	T <sub>stg</sub>									

### NOTES:

1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
2. Thermal Resistance from Junction to Ambient .375"(9.5mm) Lead Length.

## RATINGS AND CHARACTERISTIC CURVES (1N5391 THRU 1N5399)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

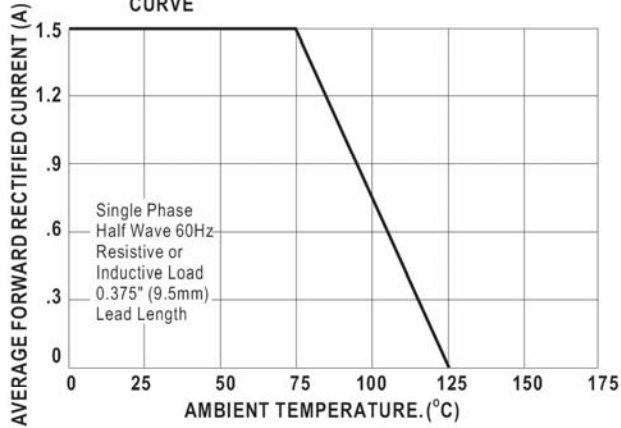


FIG.2- TYPICAL FORWARD CHARACTERISTICS

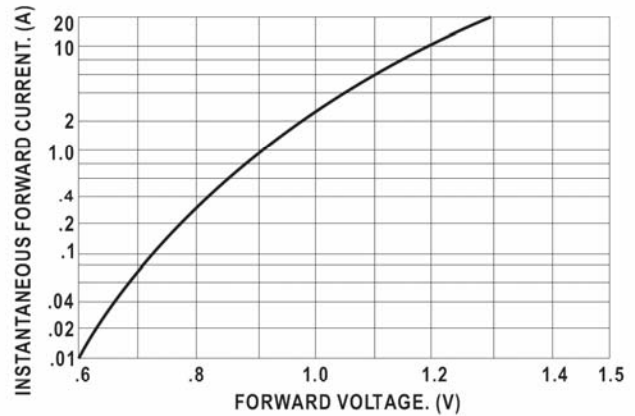


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

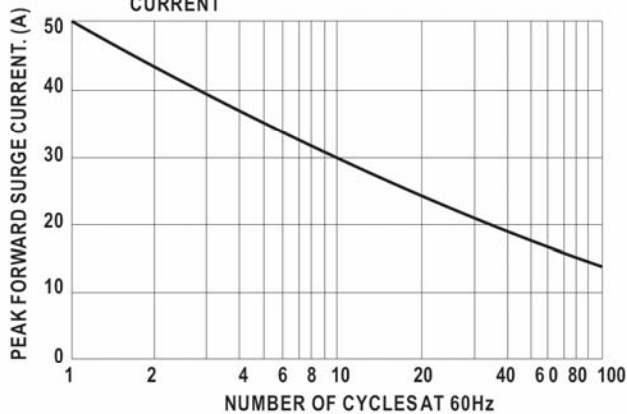


FIG.4- TYPICAL REVERSE CHARACTERISTICS

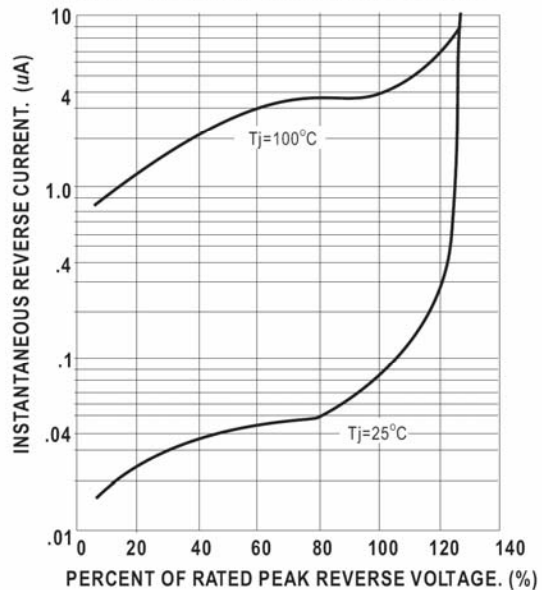


FIG.5- TYPICAL JUNCTION CAPACITANCE

