

1.5 A Silicon Rectifiers

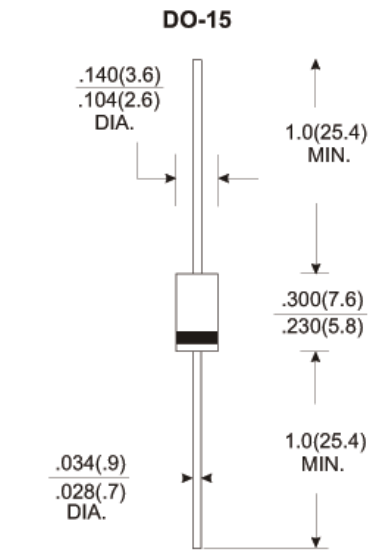
1N5391 THRU 1N5399 50 to 1000 V 1.5A

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	VRRM	50	100	200	300	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length @ T = 75°C	I(AV)	1.5								Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	IFSM	50								Amp
Maximum instantaneous Forward Voltage @ 1.5A	V _F	1.1								Volts
Maximum Reverse Current at Rated DC Blocking Voltage	I _R	5.0 50								uAmp
Typical Junction Capacitance (Note 1)	C _J	15								pF
Typical Thermal Resistance (Note 2)	R _{θJA}	65								°C/W
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{stg}									

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

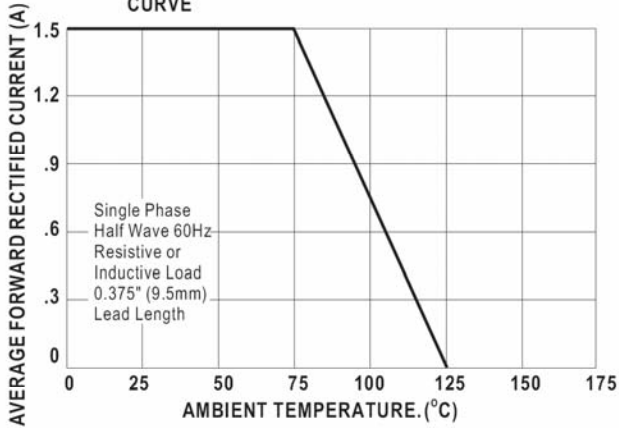


FIG.2- TYPICAL FORWARD CHARACTERISTICS

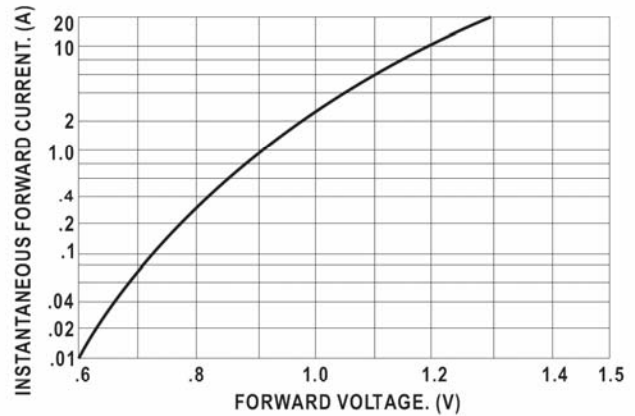


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

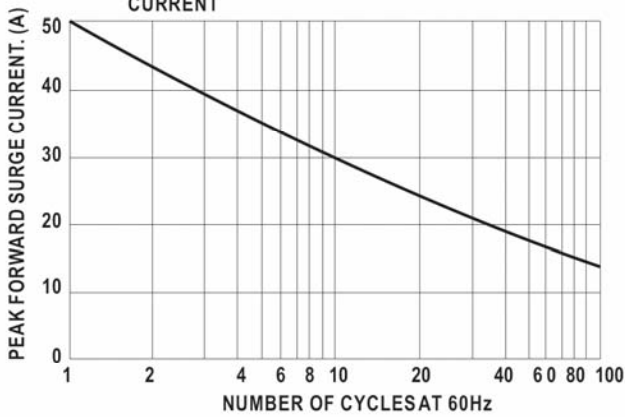


FIG.4- TYPICAL REVERSE CHARACTERISTICS

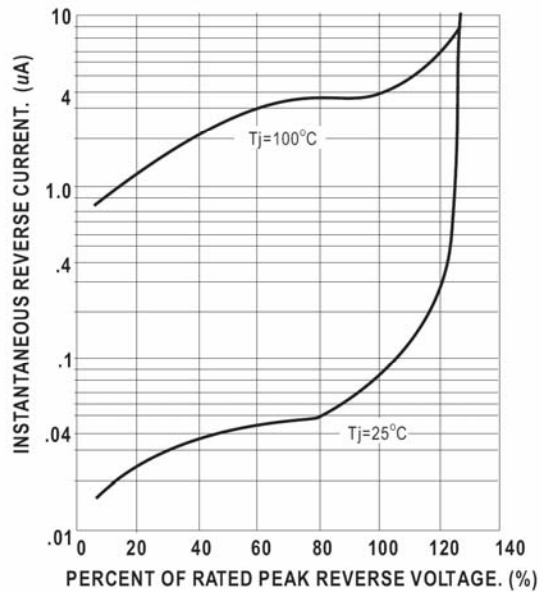


FIG.5- TYPICAL JUNCTION CAPACITANCE

