

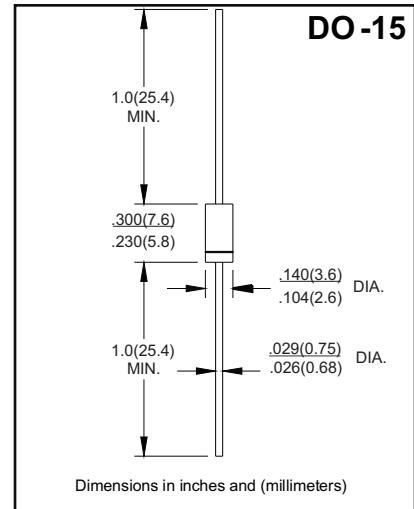
AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

FEATURES

- High Performance & Reliability best suited for Automotive application
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C 100 seconds/.375"(9.5mm)lead length at 5 lbs(2.3kg) tension

MECHANICAL DATA

- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.012 ounce, 0.33 grams
- Case: Transfer molded plastic



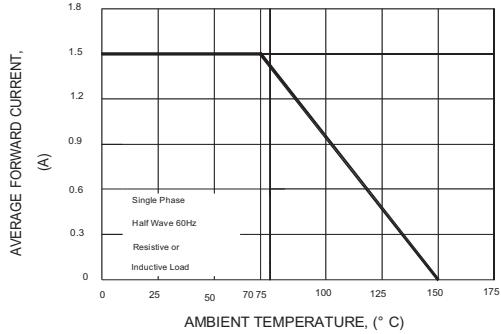
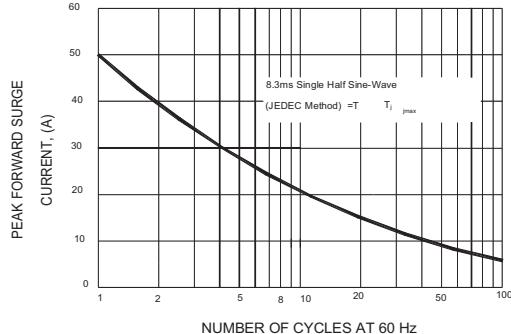
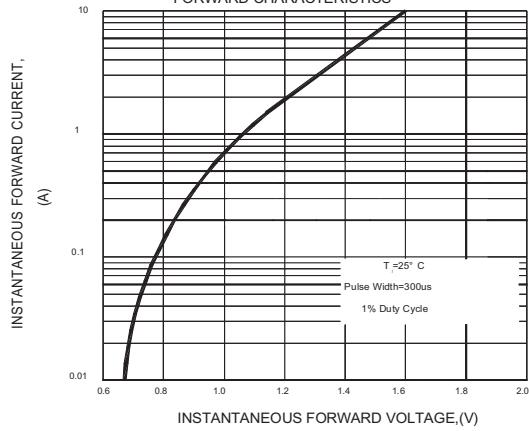
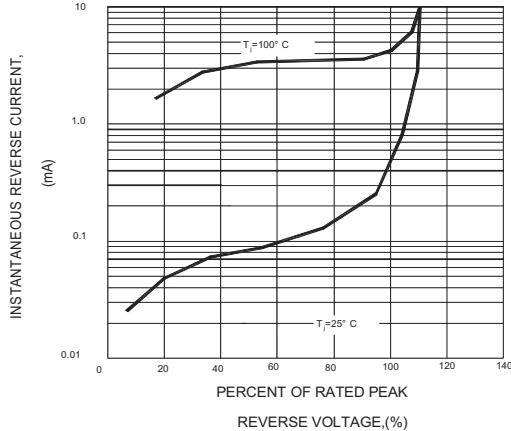
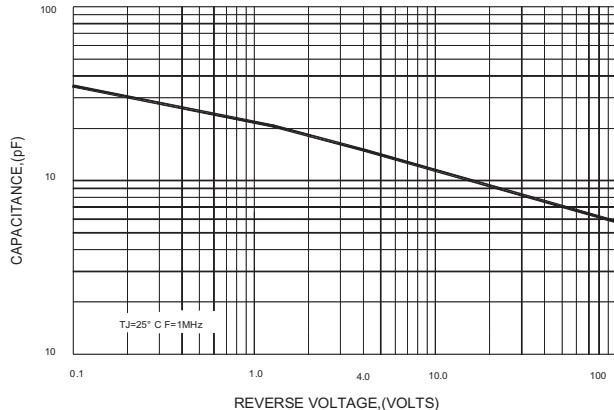
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- 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%

PARAMETER	SYMBOLS	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length at T _A = 50°C	I _(AV)										Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}										Amps
Maximum Instantaneous Forward Voltage @ 1.0A	V _F										Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	T _A = 25°C	I _R									μA
	T _A = 100°C										
Maximum Full Load Reverse Current, full cycle average 0.375"(9.5mm)lead length at T _L =-75°C	I _{R(AV)}										μA
Typical Junction Capacitance (Note 1)	C _J										pF
Typical Thermal Resistance (Note 2)	R _{θJA}										°C/W
Operating Junction Temperature Range	T _J										°C
Storage Temperature Range	T _{STG}										°C

Notes:

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to ambient at 0.375"(9.5mm) lead length, P.C.board mounted with 0.2" × 0.2" (5.0 × 5.0 mm) copper pads.

AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER
RATING AND CHARACTERISTIC CURVES 1N5391 - 1N5399
FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

FIG.4-TYPICAL REVERSE CHARACTERISTICS

FIG.5-TYPICAL JUNCTION CAPACITANCE

Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.