AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

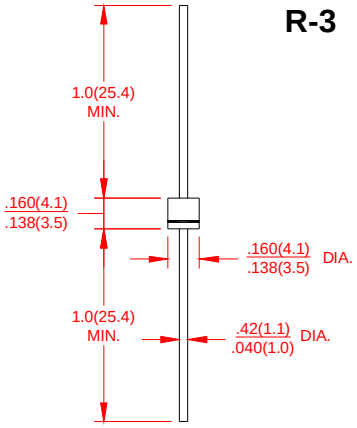
RL251 THRU RL257

VOLTAGE RANGE **50 to 1000 Volts**
CURRENT **2.5 Amperes**

FEATURES

- Low coat construction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  260℃/10 secods/.375”(9.5mm)lead length at 5 lbs(2.3kg) tension

R-3



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: Transfer molded plastic
- 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: 0.014 ounce, 0.39 grams

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%

		SYMBOLS	RL251	RL252	RL253	RL254	RL255	RL256	RL257	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375”(9.5mm) lead length at T_A= 50℃		$I_{(AV)}$	2.5							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)		I_{FSM}	30							Amps
Maximum Instantaneous Forward Voltage @2.5A		V_F	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	T_A = 25℃	I_R	5.0							μA
	T_A = 100℃		50							
Maximum Full Load Reverse Current, full cycle average 0.375”(9.5mm)lead length at T_L=75℃		$I_{R(AV)}$	70							μA
Typical Junction Capacitance (Note 1)		C_J	30							pF
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	40							℃/W
Operating Junction Temperature Range		T_J	-55 to +150							℃
Storage Temperature Range		T_{STG}	-55 to +150							℃

Notes:

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to Ambient at .375”(9.5mm)lead length, P.C.board mounted.

AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

RL251 THRU RL257	VOLTAGE RANGE	50 to 1000 Volts
	CURRENT	2.5 Amperes

RATING AND CHRACTERISTIC CURVES RL251 Thur RL257

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

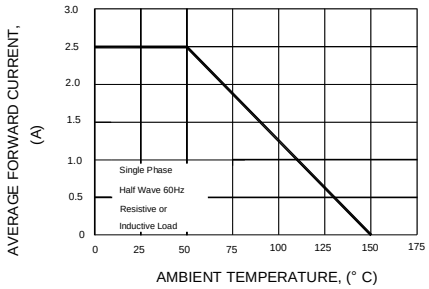


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

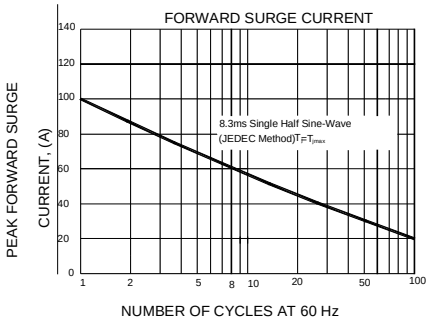


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

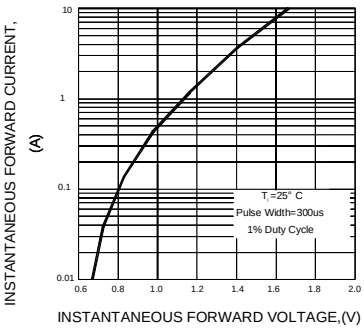


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

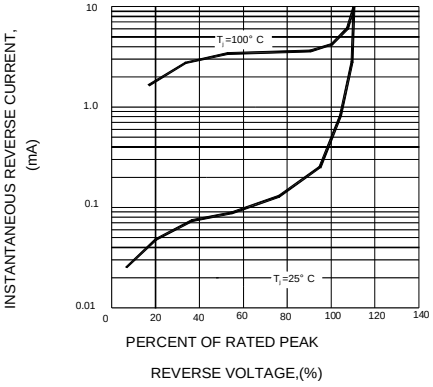


FIG.5-TYPICAL JUNCTION CAPACITANCE

