GMGarboMicro™
Semiconductor

RL251 THRU RL257

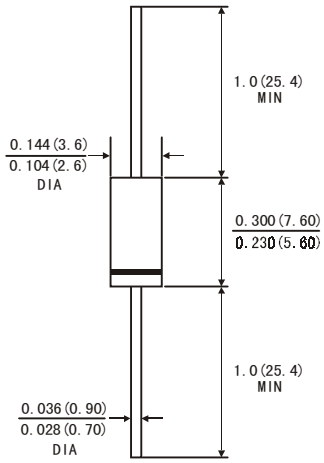
GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts
Forward Current -2.5Amperes

FEATURES

- The plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High surge current capability
- 2.5A operation at T_L=75℃ with no thermal runaway
- Low reverse leakage
- High temperature soldering guaranteed: 250℃/10 seconds,0.375"(9.5mm) lead length,5lbs.(2.3kg)tension

DO-15



Dimensions in inches and (millimeters)

MECHANICAL DATA

- *Case*: DO-15 molded plastic body
- *Terminals*: Lead solderable per MIL-STD-750,method 2026
- *Polarity*: Color band denotes cathode end
- *Mounting Position*: Any
- *Weight*: 0.021ounce, 0.60 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25℃ ambient temperature unless otherwise specified ,Single phase ,half wave 60Hz,,resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	RL 251	RL 252	RL 253	RL 254	RL 255	RL 256	RL 257	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	300	400	600	200	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	210	280	420	140	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	300	400	600	200	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm)lead length at T_A=75℃	$I_{(AV)}$	2.5							Amps
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150.0							Amps
Maximum Instantaneous Forward Voltage at I_{FM}=2.5 A ,T_A=25℃	V_F	1.1							Volts
Maximum Reverse current at rated DC Blocking Voltage (T_A=25℃)	I_R	5.0							μA
Maximum Reverse current at rated DC Blocking Voltage (T_A=100℃)	I_R	50.0							μA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	35.0							℃/W
Typical Junction Capacitance(Note 1)	C_J	35.0							pF
Operating and Storage temperature Range	T_J T_{STG}	-50 to+175							℃

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length , P.C.B. mounted

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RATINGS AND CHARACTERISTIC CURVES RL251 THRU RL257

FIG.1-FORWARD CURRENT DERATING CURVE

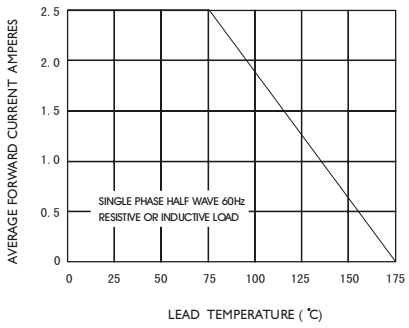

FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

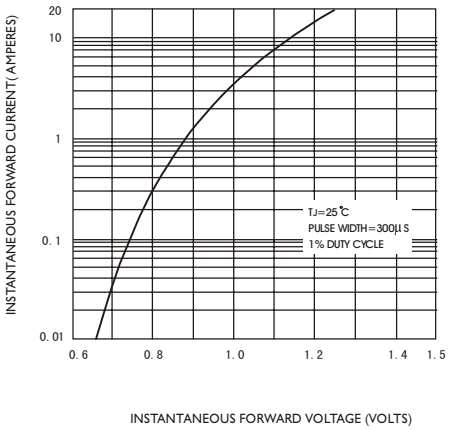

FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

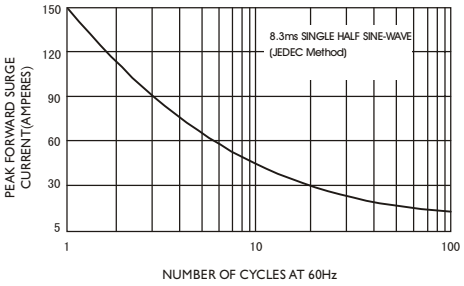

FIG.4-TYPICAL REVERSE CHARACTERISTICS

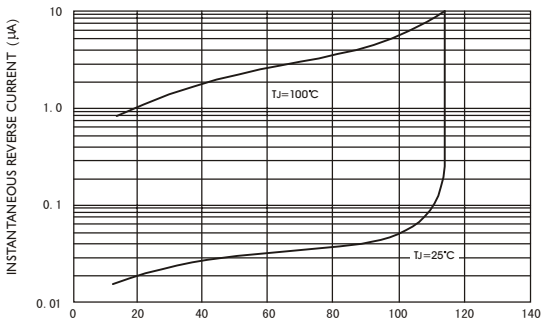

FIG.5-TYPICAL JUNCTION CAPACITANCE