RL101F THRU RL107F

FAST SWITCHING PLASTIC RECTIFIER

VOLTAGE:50 TO 1000V CURRENT: 1.0A

VOLTARISTECH INC.
POWER • PRECISION • INNOVATION

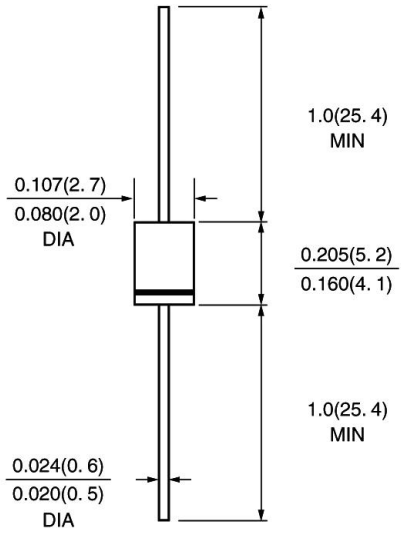
FEATURE

Molded case feature for auto insertion
High current capability
Low leakage current
High surge capability
High temperature soldering guaranteed
250°C/10sec/0.375”lead length at 5 lbs tension
Fast switching for high efficiency

MECHANICAL DATA

Terminal:Plated axial leads solderable per MIL-STD 202E, method 208C
Case:Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity:color band denotes cathode
Mounting position:any

A-405



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	RL 101F	RL 102F	RL 103F	RL 104F	RL 105F	RL 106F	RL 107F	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8”lead length at Ta =55°C	If(av)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	30.0							A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.3							V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	5.0 100.0							µA µA
Maximum Reverse Recovery Time (Note 1)	Trr	150				250	500		nS
Typical Junction Capacitance (Note 2)	Cj	15.0							pF
Typical Thermal Resistance (Note 3)	R(ja)	50.0							°C/W
Storage and Operating Junction Temperature	Tstg, Tj	-50 to +150							°C

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 0.375”lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES RL101F THRU RL107F

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

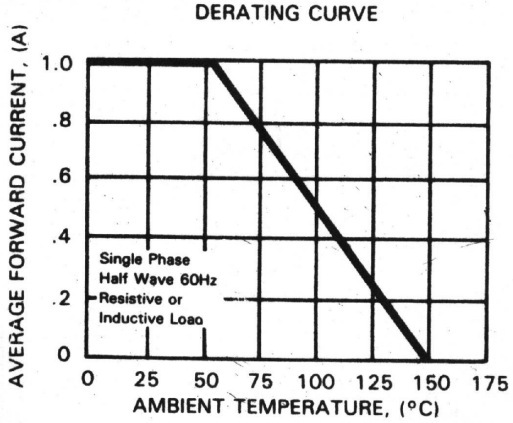


FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

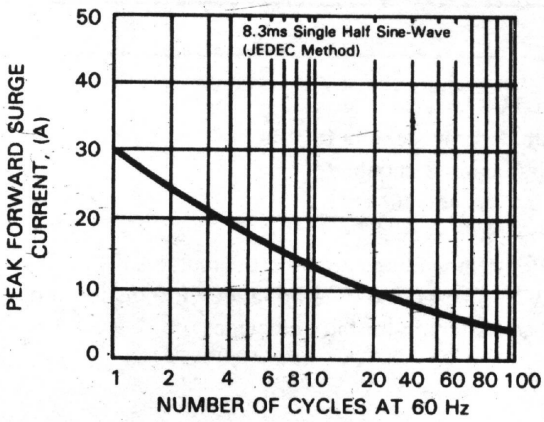


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

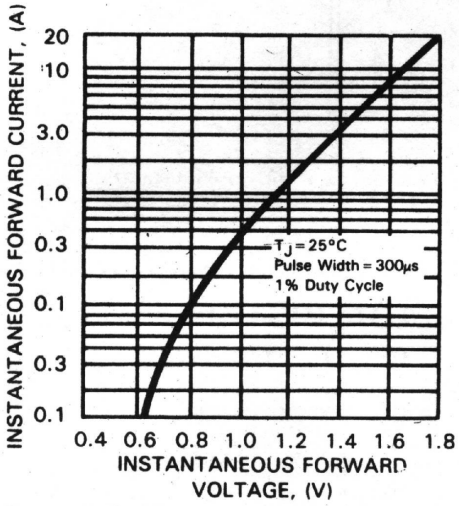


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

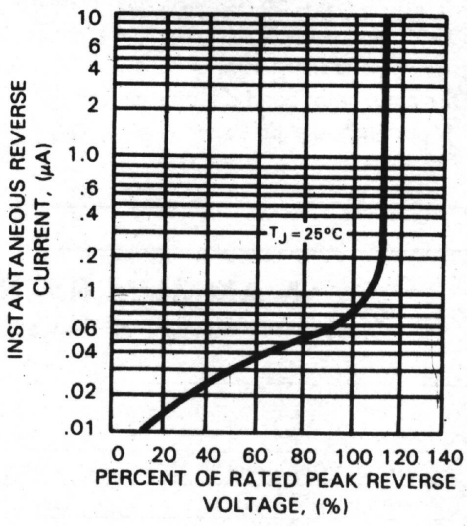


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FIG. 5 - TYPICAL JUNCTION CAPACITANCE