

RL101H THRU RL108H

HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

FEATURES

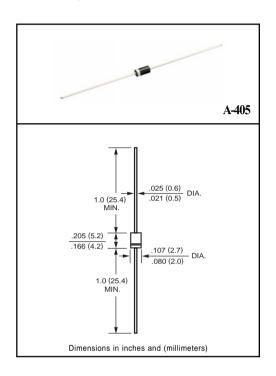
- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage
- * High current capability
- * High speed switching
- * High surge capability
- * High reliability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.33 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

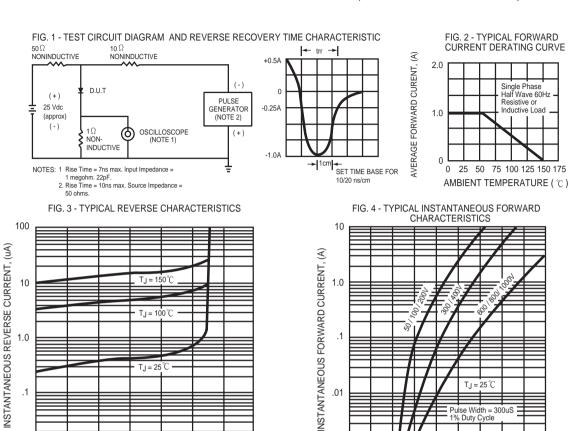
RATINGS	SYMBOL	RL101H	RL102H	RL103H	RL104H	RL105H	RL106H	RL107H	RL108H	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA= 55°C	lo	1.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30						Amps		
Typical Junction Capacitance (Note 2)	CJ	15 12					pF			
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150							٥C	

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	RL101H RL102H R	RL103H RL	L104H RL105H	RL106H RL107H	RL108H	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC	VF	1.0		1.3	1.7		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage TA = 25°C	la.	5.0					
Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at TL = 55°C	IR 100						uAmps
Maximum Reverse Recovery Time (Note 1)	trr	50		75		nSec	

NOTES: 1. Test Conditions: IF = 0.5A, IR = -1.0A, IRR = -0.25A

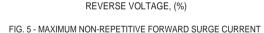
RATING AND CHARACTERISTIC CURVES (RL101H THRU RL108H)



.01

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0 .2 .4 .6 .8 1.0 1.2 1.4 1.6



PERCENT OF RATED PEAK

60

80

100

120

140

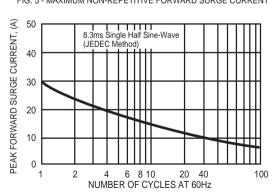
.1

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0

20

40





INSTANTANEOUS FORWARD VOLTAGE, (V)

Pulse Width = 300uS 1% Duty Cycle

