

GLASS PASSIVATED SILICON RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Amperes

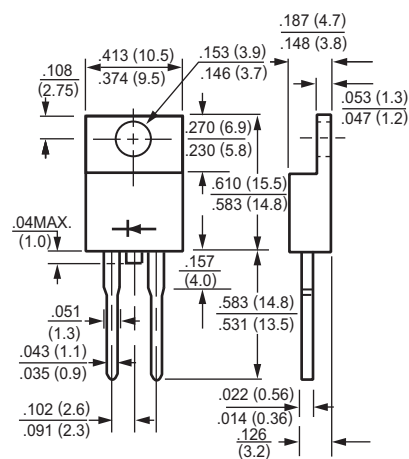
FEATURES

- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High surge capability
- * High reliability

MECHANICAL DATA

- * Case: TO-220 molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 2.24 grams
- * Polarity: As marked

TO-220A



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	RL801	RL802	RL803	RL804	RL805	RL806	RL807	UNITS
Maximum Recurrent 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 T _C = 100°C (Note 1)	I _O	8.0							Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	200							Amps
Typical Current Squared Time	I ² t	167							A ² /Sec
Typical Thermal Resistance	R _{θJC}	3.6							°C/W
Typical Junction Capacitance (Note 2)	C _J	40							pF
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to + 150							°C

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

CHARACTERISTICS		SYMBOL	RL801	RL802	RL803	RL804	RL805	RL806	RL807	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC		V _F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _c = 25°C	I _R	10							uAmps
	@T _c = 100°C		100							

NOTES : 1. Case Temperature Measured at Metal Tab.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Suffix " R " = Common Anode.

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REV:A

RATING AND CHARACTERISTIC CURVES (RL801 THRU RL807)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

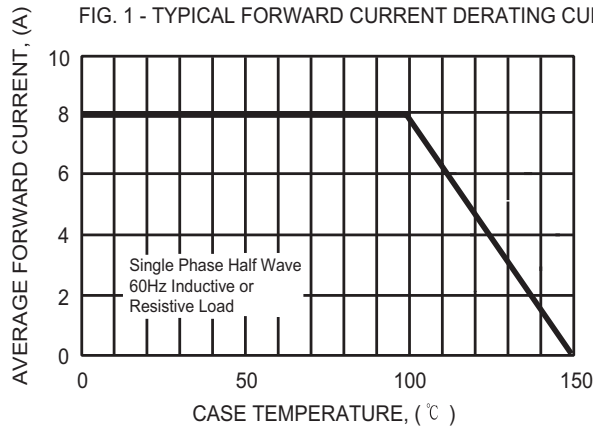


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

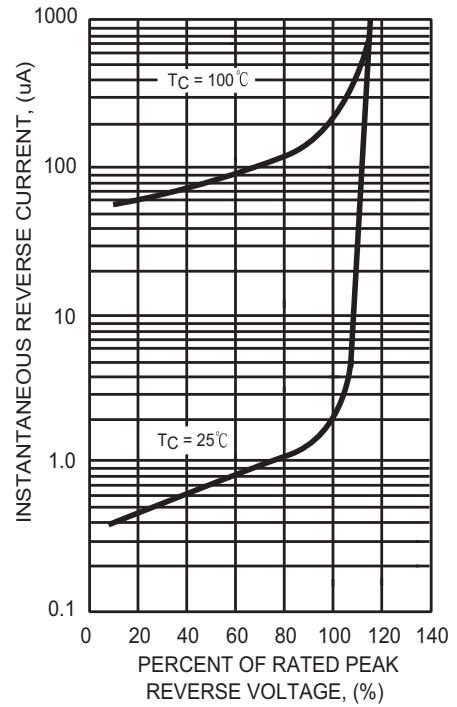


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

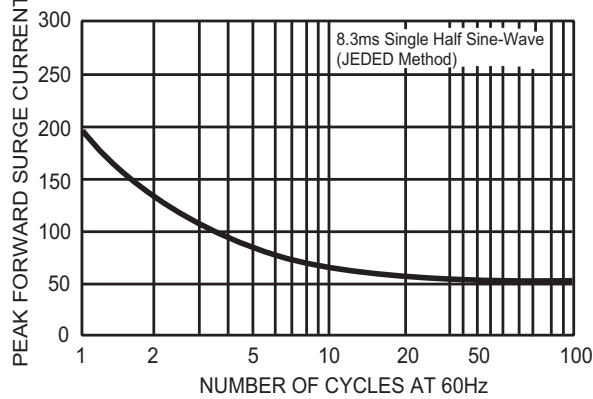


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

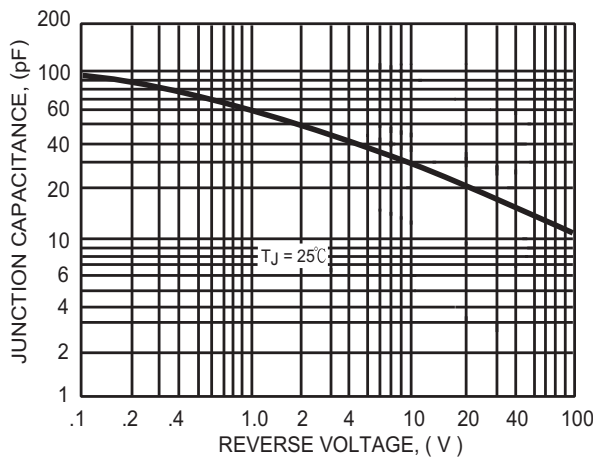
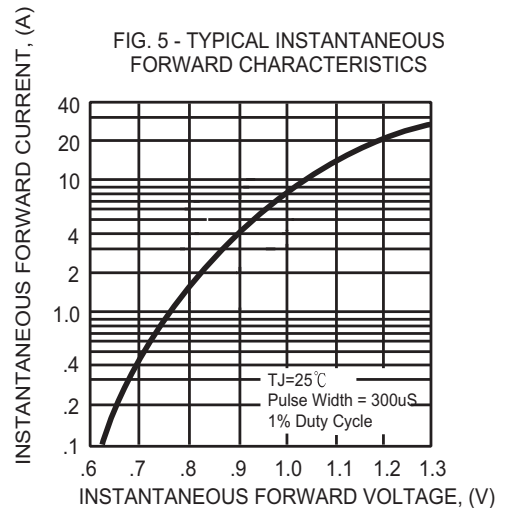
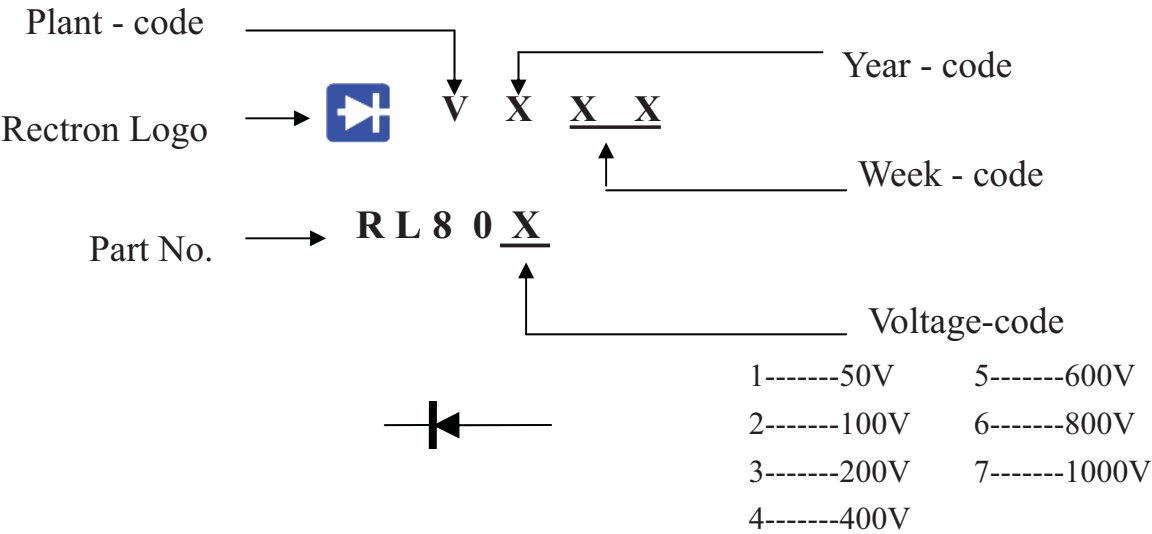


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



Marking on the body



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
(I)TO-220/TO-220(A)	-C	2,000	550*140*92	572*308*120	4,000	11.80

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