

GLASS PASSIVATED SILICON RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 16 Amperes

FEATURES

- * Low power loss, high efficiency
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High surge capability
- * High reliability

MECHANICAL DATA

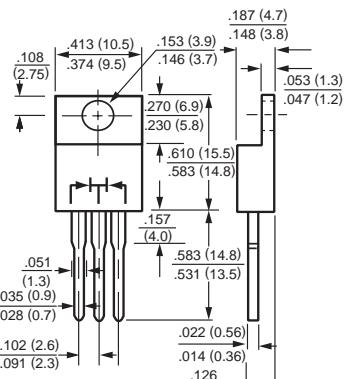
- * Case: TO-220 molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 2.24 grams
- * Polarity: As marked

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%.



TO-220



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

RATINGS	SYMBOL	RL16 01C	RL16 02C	RL16 03C	RL16 04C	RL16 05C	RL16 06C	RL16 07C	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					16.0			Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}					200			Amps
Typical Thermal Resistance	R _{θJC}				3.0				°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)

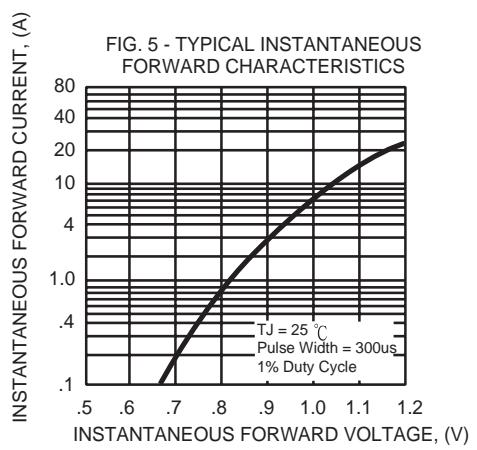
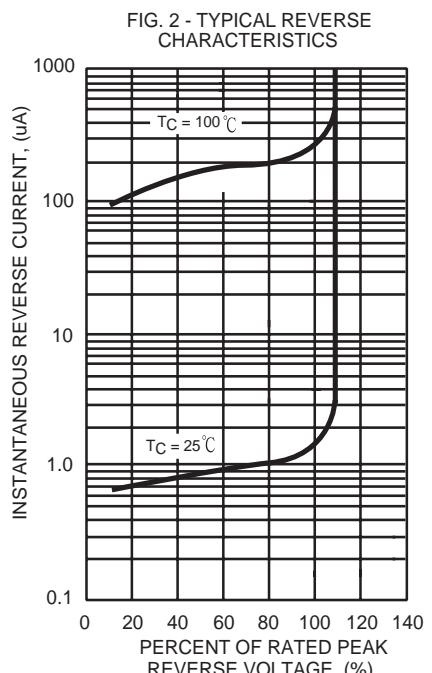
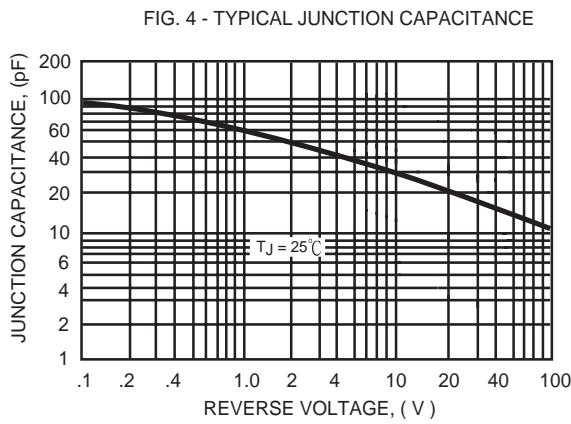
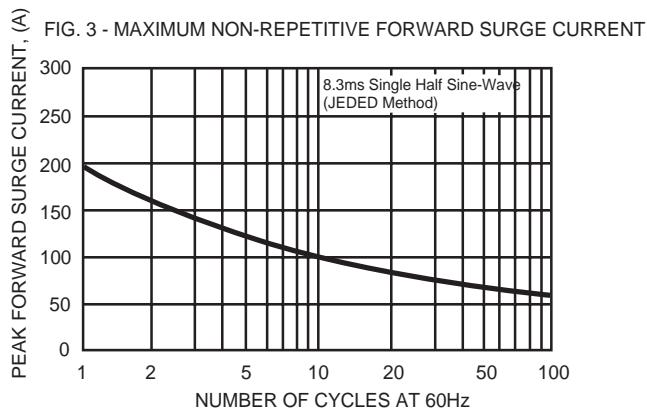
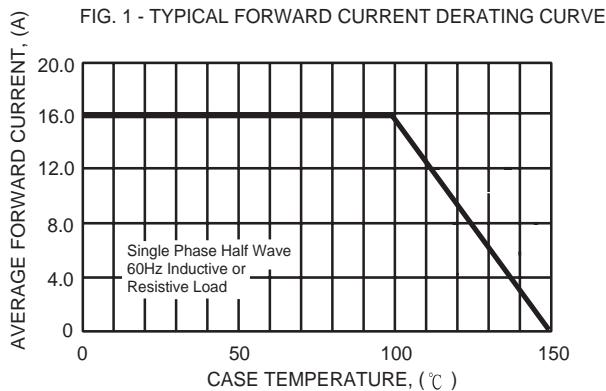
CHARACTERISTICS	SYMBOL	RL16 01C	RL16 02C	RL16 03C	RL16 04C	RL16 05C	RL16 06C	RL16 07C	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC	V _F				1.1				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R				10				uAmps

NOTES : 1. Case Temperature Measured at Metal Tab.

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

3. Suffix "A" = Common Anode.

RATING AND CHARACTERISTIC CURVES (RL1601C THRU RL1607C)



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