

THREE-PHASE AUTOMOTIVE RECTIFIER

VOLTAGE RANGE-50 to 1000 Volts CURRENT-8.0 Amperes

FEATURES

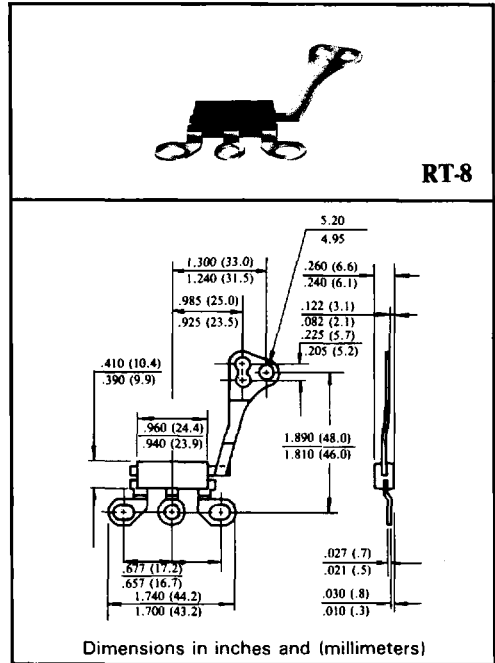
- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL94V-0 rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 6.4 grams

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 $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	RT805	RT81	RT82	RT84	RT86	RT88	RT810	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 at $T_A = 60^\circ\text{C}$	I_o	8.0								Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150								Amps
Operating and Storage Temperature Range	T_J, T_{STG}	- 65 to + 175								$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	RT805	RT81	RT82	RT84	RT86	RT87	RT810	UNITS	
Maximum Instantaneous Forward Voltage at 3.0A DC	V_F	1.1								Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$	I_R	10								μAmps

NOTES: Enough heat sink must be considered in application.

RATING AND CHARACTERISTIC CURVES (RT805 THRU RT810)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE.

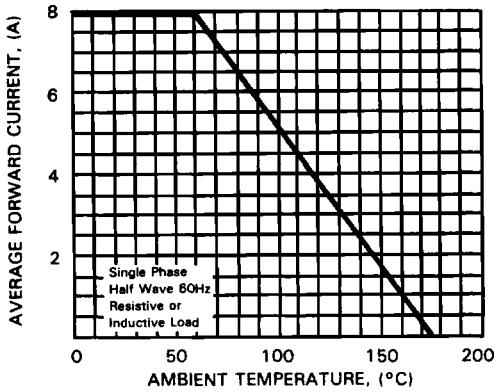


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT.

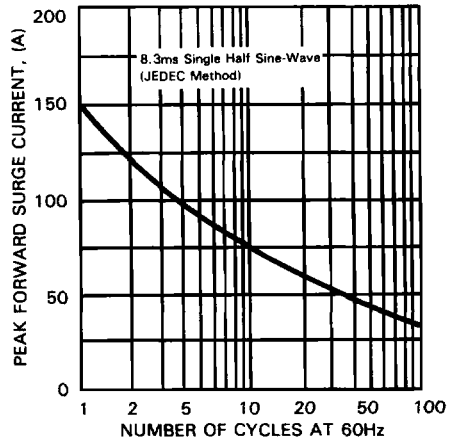


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

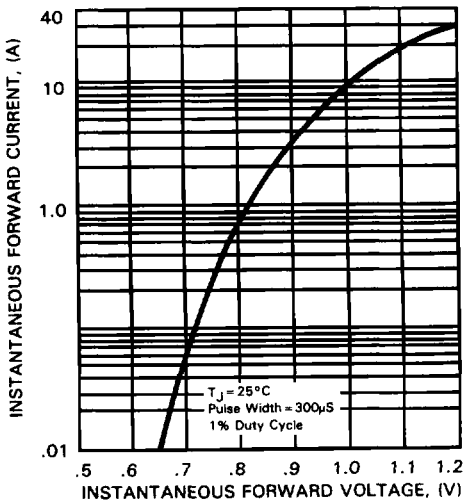


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

