



AUTOMOTIVE RECTIFIER

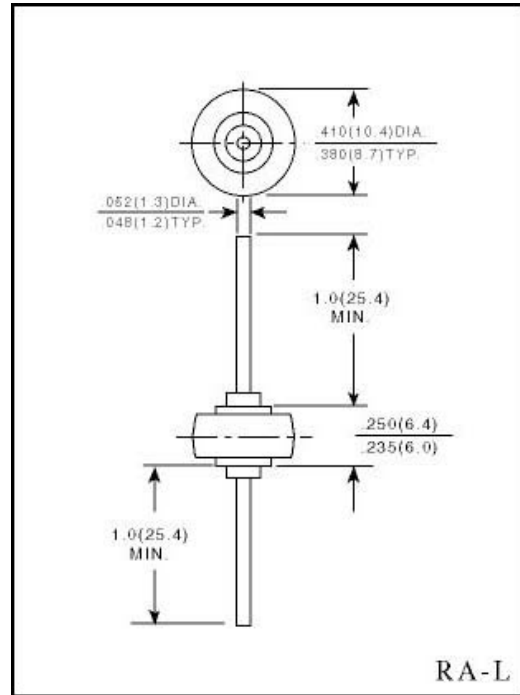
RAL2505 THRU RAL2510

FEATURES

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

MECHANICAL DATA

- Case: transfer molded plastic
- Epoxy: UL94V - 0 rate flame retardant.
- Polarity: Near marking denotes cathode.
- Lead: Plated axial lead, solderable per MIL - STD - 202E method 208C
- Mounting position: Any
- Weight: 0.11 ounce, 3.0gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	RAL 2505	RAL 251	RAL 252	RAL 254	RAL 256	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current, 0.375" (9.5mm) Lead length at $T_A = 60^\circ C$	$I_{(AV)}$	25.0					Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	500					Amps
Maximum Instantaneous Forward Voltage at 25 A	V_F	1.0					Volts
Maximum DC Reverse Current at rated DC blocking voltage	I_R	5.0					μA
Typical Thermal Resistance at 0.5" (12.7) lead length (Note 1)	$R_{\theta JC}$	1.0					$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	(-65 to +175)					$^\circ C$

NOTES:

1. P.C. mounted



RATINGS AND CHARACTERISTIC CURVES RAL2505 THRU RAL256

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

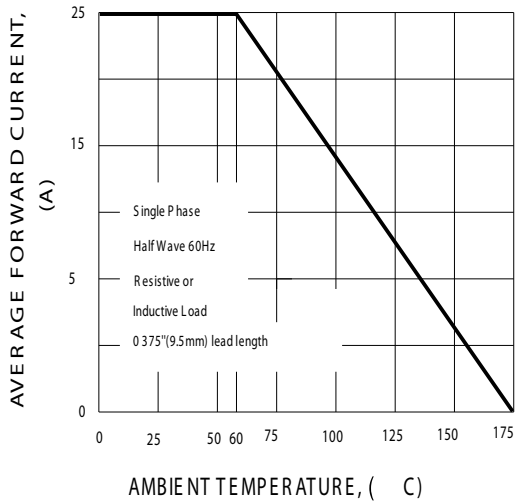


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

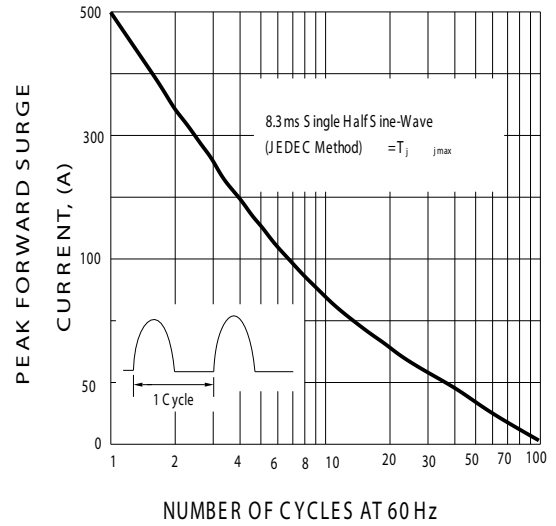


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

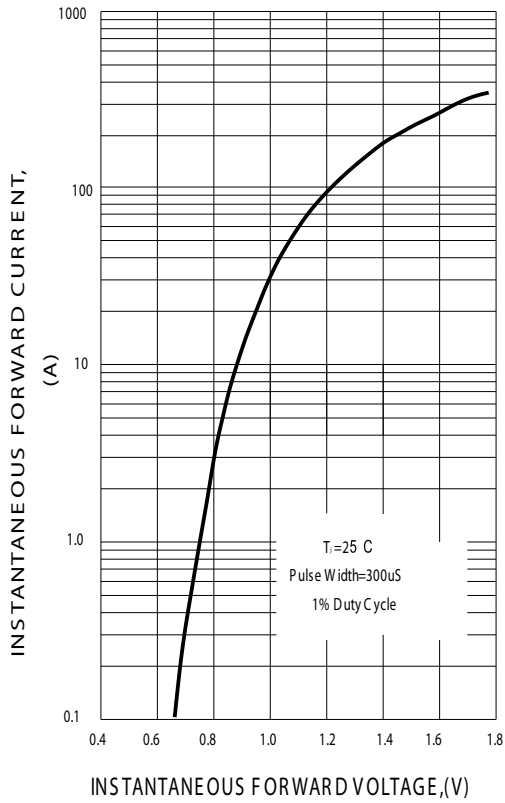


FIG.4. FORWARD POWER DISSIPATION

