

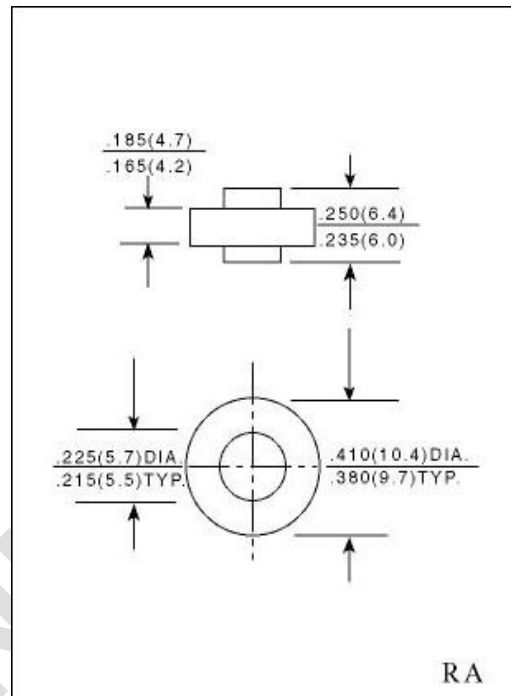
AUTOMOTIVE RECTIFIER

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: Color ring denotes cathode end.
- Lead: Plated slug, solderable per MIL - STD - 202E method 208C
- Mounting position: Any
- Weight: 0.067 ounce, 1.90gram



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	RA 2505	RA 251	RA 252	RA 254	RA 256	RA 258	RA 2510	UNIT
Maximum Repetitive 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 $T_C = 125^\circ\text{C}$	$I_{(AV)}$	25							Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	400							Amps
Maximum Instantaneous Forward Voltage at 25 A	V_F	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A = 25^\circ\text{C}$	25							μA
	$T_C = 100^\circ\text{C}$	500							
Typical Thermal Resistance	$R_{\theta JC}$	1.0							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	(-65 to +175)							$^\circ\text{C}$

NOTES:

1. Enough heatsink must be considered in application.

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

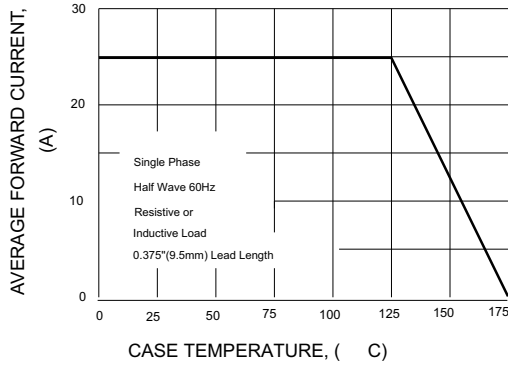


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

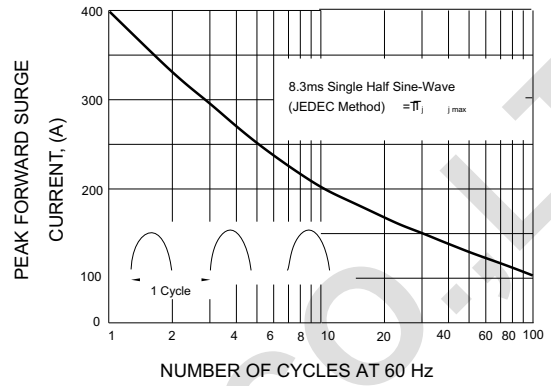


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

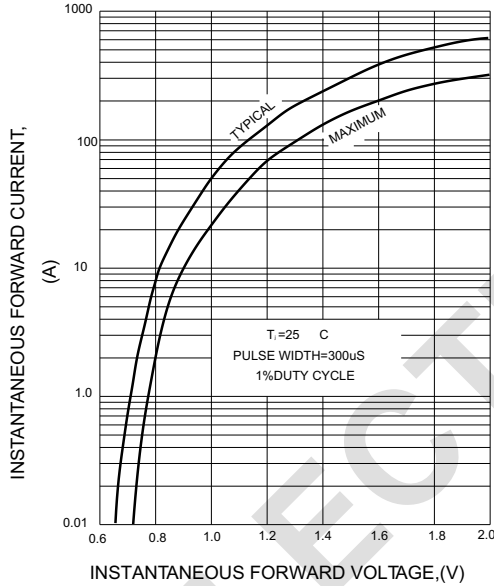


FIG.4. FORWARD POWER DISSIPATION

