



AUTOMOTIVE RECTIFIER

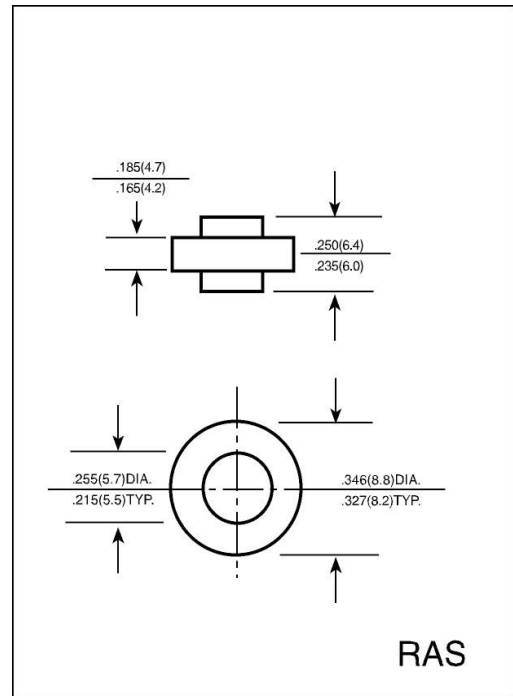
RAS5001 THRU RAS5004

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: 0.064 ounce, 1.82gram



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	RAS 5001	RAS 5002	RAS 5003	RAS 5004	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	300	400	Volts
Maximum RMS Voltage	V_{RMS}	70	140	210	280	Volts
Maximum DC Blocking Voltage	V_{DC}	100	200	300	400	Volts
Maximum Average Forward Rectified Current, at $T_C = 105^\circ C$	$I_{(AV)}$	50				Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	600				Amps
Maximum Instantaneous Forward Voltage at 80 A	V_F	1.08				Volts
Maximum DC Reverse Current at rated DC blocking voltage	I_R	$T_A = 25^\circ C$	5.0			μA
		$T_C = 100^\circ C$	400			
Typical Thermal Resistance	$R_{\theta JC}$	0.8				$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	(-65 to +175)				$^\circ C$
Polarity and voltage denotion color band		Yellow	Silver	Orange	Green	

NOTES:

1. Enough heatsink must be considered in application.

RATINGS AND CHARACTERISTIC CURVES RAS5001 THRU RAS5004

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

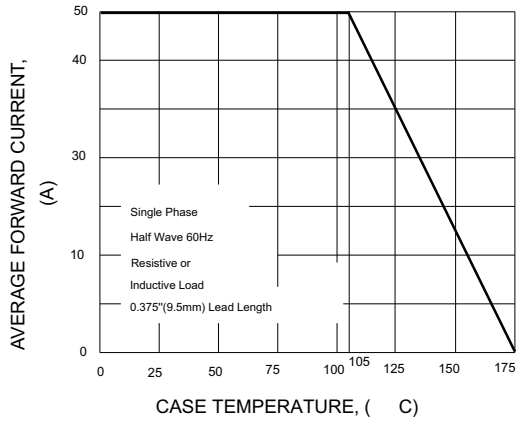


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

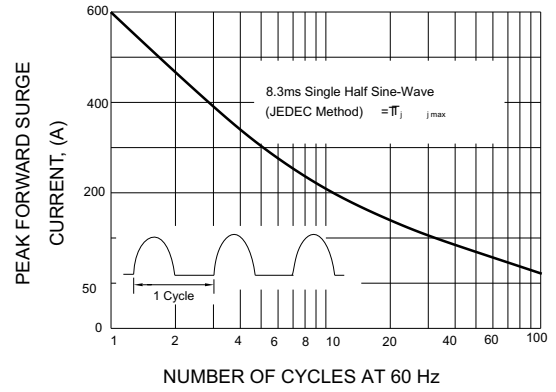


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

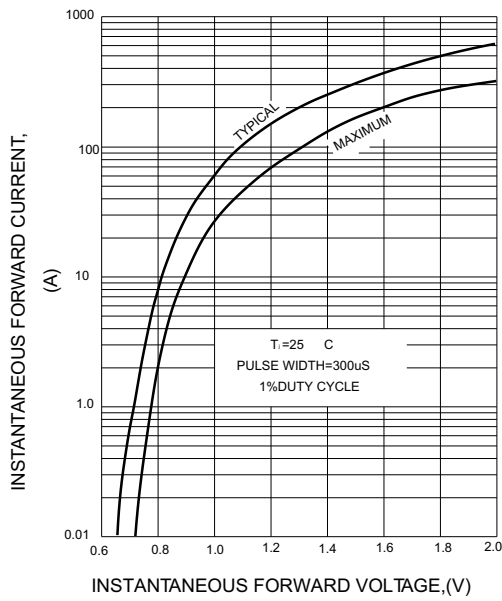


FIG.4. FORWARD POWER DISSIPATION

