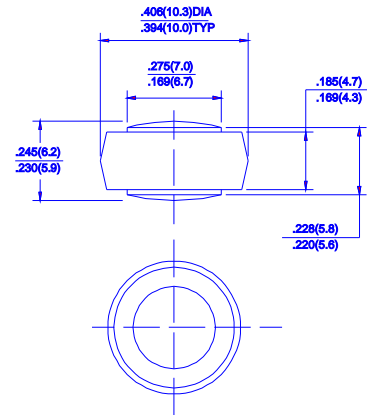




RA8005 THRU RA806 80A, 50 - 600V AUTOMOTIVE BUTTON DIODE

CASE: RA OR AR



Dimensions in inches and (millimeters)

FEATURES

- Low Leakage
- Low forward voltage drop
- High current capability
- High forward surge current capacity

MECHANICAL DATA

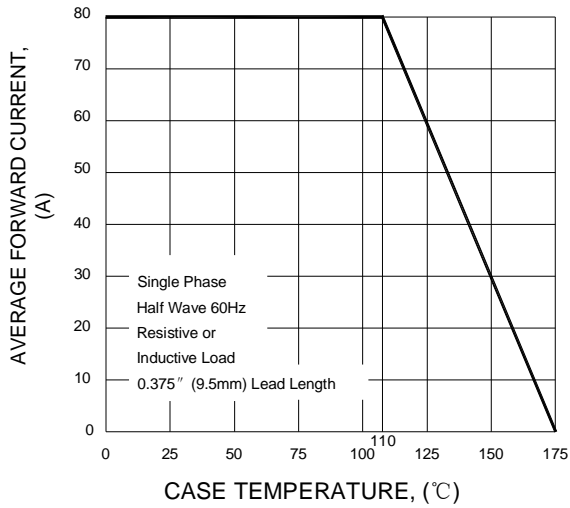
- Case: transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Plated slug , solderable per MIL-STD-202E method 208C
- Polarity: Color ring denotes cathode end
- Mounting Position: any
- Weight: 0.085 ounces, 2.40 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

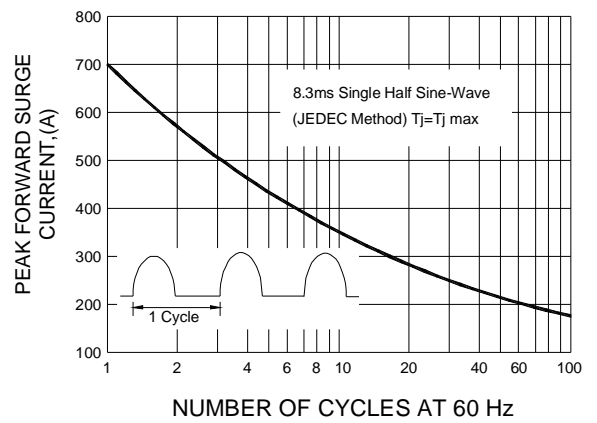
- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60HZ, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	RA8005	RA801	RA802	RA804	RA806	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, At $T_c=110^\circ\text{C}$	I_O	80.0					Amps
Peak Forward Surge Current 3.3mS single half sine wave superimposed on Rated load (JEDEC method)	I_{FSM}	700					Amps
Maximum instantaneous Forward Voltage at 100A	V_F	1.02					Volts
Maximum DC Reverse Current at Rated $T_A=25^\circ\text{C}$ DC Blocking Voltage per element $T_A=100^\circ\text{C}$	I_R	5.0					UA
		500					
Typical Thermal Resistance	$R_{\theta JC}$	0.8					$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	(-65 to +175)					$^\circ\text{C}$

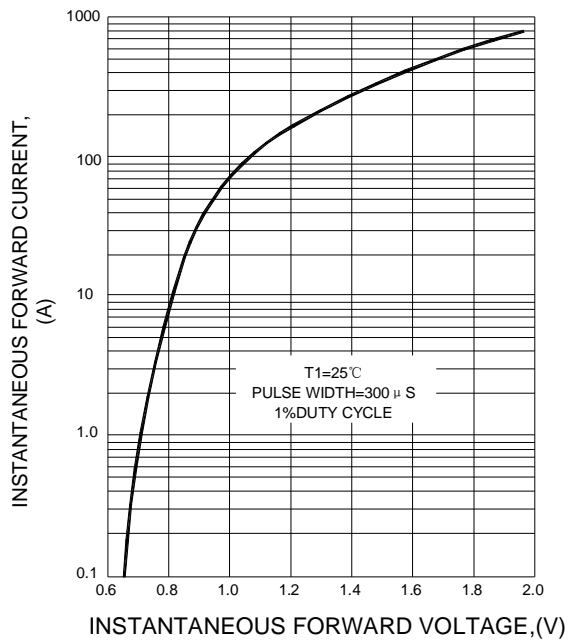
F1G.1 TYPICAL FORWARD CURRENT DERATING CURVE



F1G.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4 FORWARD POWER DISSIPATION

