



BUTTON AUTOMOTIVE RECTIFIER

ARL1505 THRU ARL156

VOLTAGE RANGE 50 to 600 Volts

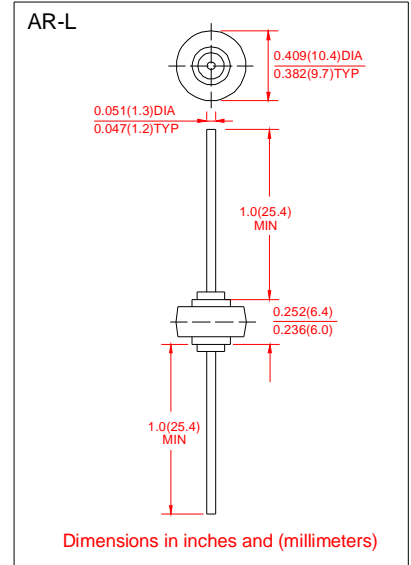
CURRENT 15.0 Amperes

FEATURES

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

MECHANICAL DATA

- Technology: Cell with vacuum soldered
- Case: transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Plated lead , solderable per MIL-STD-202E method 208C
- Polarity: Color ring denotes cathode end
- Mounting Position: any
- Weight: 0.083 ounces, 2.32 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	ARL1505	ARL151	ARL152	ARL154	ARL156	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 $T_c=110^\circ C$	I_O	15.0					Amps
Peak Forward Surge Current 3.3mS single half sine wave superimposed on Rated load (JEDEC method)	I_{FSM}	300					Amps
Rating for fusing ($t < 8.3ms$)	I^2t	374					A ² S
Maximum instantaneous Forward Voltage at 80A	V_F	1.1					Volts
Maximum DC Reverse Current at Rated $T_A=25^\circ C$	I_R	5.0					UA
DC Blocking Voltage per element $T_A=100^\circ C$		250					
Typical Thermal Resistance	$R_{\theta JC}$	1.0					°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	(-65 to +175)					°C
Polarity and voltage demotion color band		Red	Yellow	Silver	Green	Green	

Notes:

1. Enough heatsink must be considered in application.



BUTTON AUTOMOTIVE RECTIFIER

ARL1505 THRU ARL156

VOLTAGE RANGE 50 to 600 Volts

CURRENT 15.0 Amperes

RATINGS AND CHARACTERISTIC CURVES ARL1505 THRU ARL156

FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

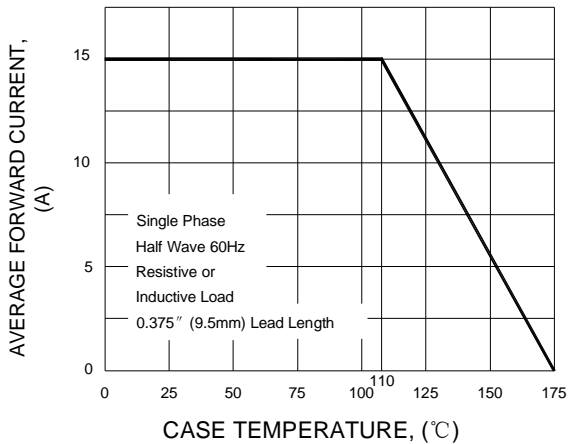


FIG.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

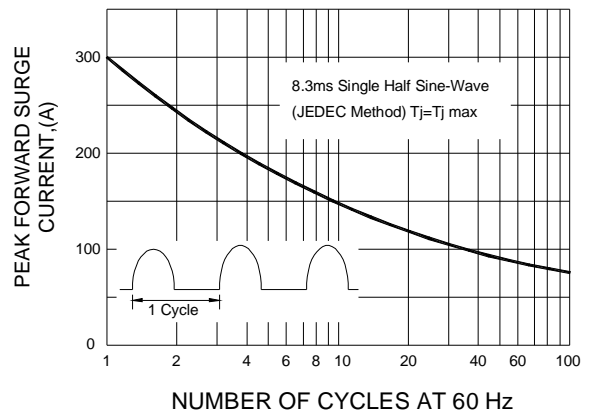


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

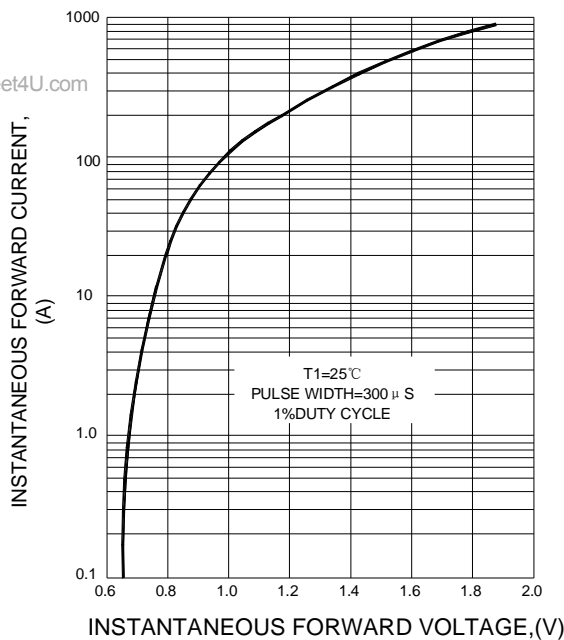
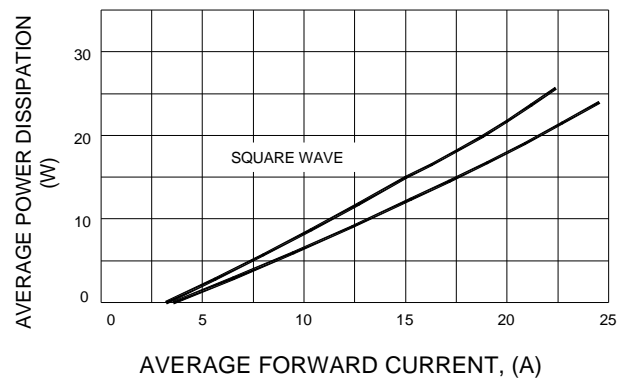


FIG.4 FORWARD POWER DISSIPATION



www.DataSheet4U.com