



BUTTON AUTOMOTIVE RECTIFIER

FARL2505 THRU FARL256
FARSL2505 THRU FARSL256

VOLTAGE RANGE 50 to 600 Volts

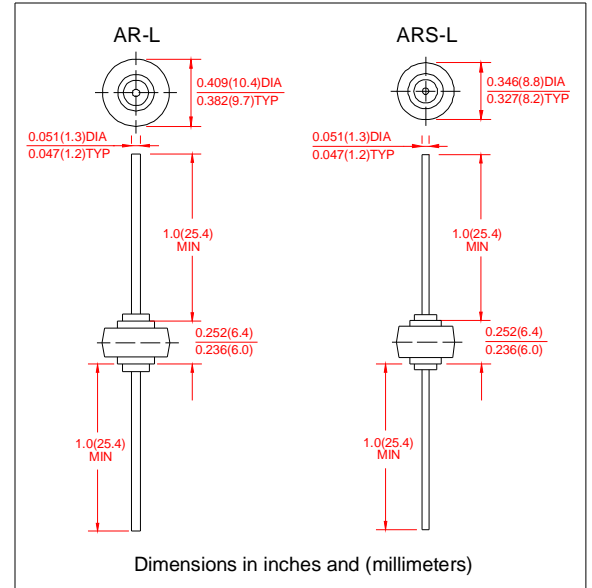
CURRENT 25.0 Amperes

FEATURES

- Low Leakage
- Low forward voltage drop
- High current capability
- High forward surge current capacity
- Fast switching for high efficiency

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	FARL2505 FARSL2505	FARL251 FARSL251	FARL252 FARSL252	FARL254 FARSL254	FARL256 FARSL256	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	25.0					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^2S
Maximum instantaneous Forward Voltage at 80A	V_F	1.15				1.30	Volts
Maximum DC Reverse Current at Rated $T_A=25^\circ C$ DC Blocking Voltage per element $T_A=100^\circ C$	I_R	10					UA
		100					
Maximum Reverse Recovery Time Test conditions $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$	t_{rr}	150				200	nS
Typical Thermal Resistance	$R_{\theta JC}$	1.0					$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	(-65 to +175)					$^\circ C$
Polarity and voltage demotion color band		Red	Yellow	Silver	Green	Green	

Notes:

1. Enough heatsink must be considered in application.



BUTTON AUTOMOTIVE RECTIFIER

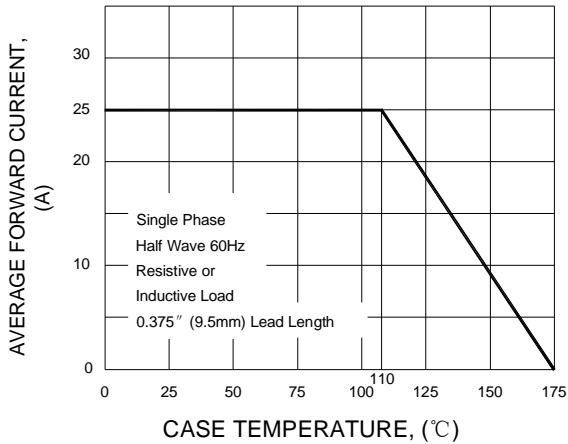
FARL2505 THRU FARL256
FARSL2505 THRU FARSL256

VOLTAGE RANGE 50 to 600 Volts
CURRENT 25.0 Amperes

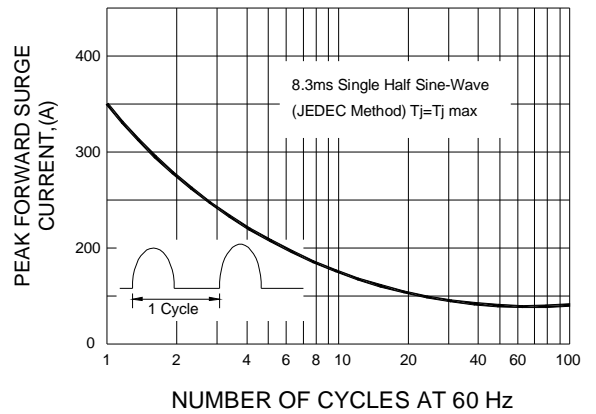
RATINGS AND CHARACTERISTIC CURVES

FARL2505 THRU FARL256
FARSL2505 THRU FARSL256

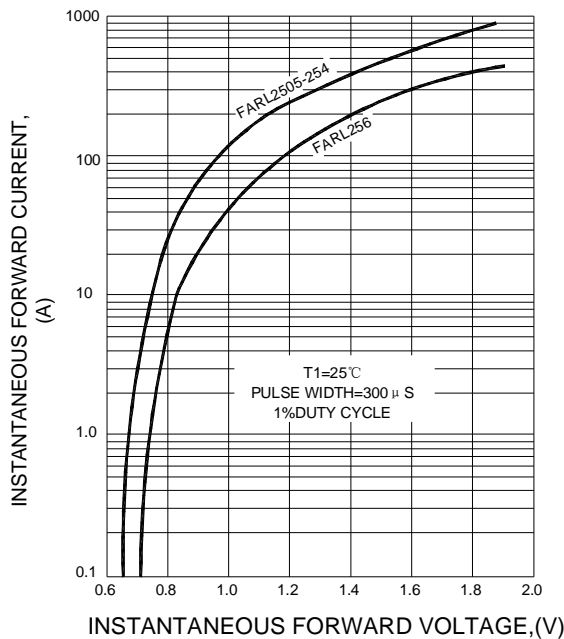
F1G.1 TYPICAL FORWARD CURRENT DERATING CURVE



F1G.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4 FORWARD POWER DISSIPATION

