

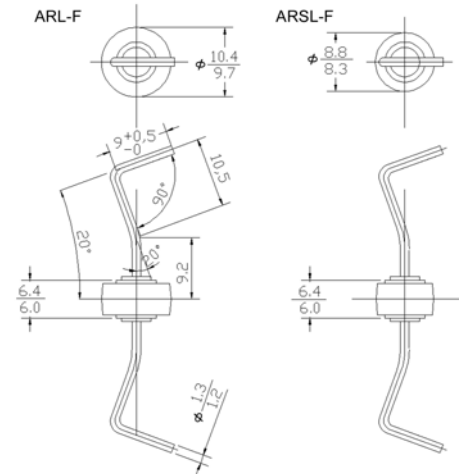
Technical Specification:

Features:

- ◆ Low leakage
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High forward surge current capability

Mechanical Data:

- ◆ Technology: Button with vacuum soldered.
- ◆ Case: Transfer molded plastic.
- ◆ Polarity: Color ring denotes cathode.
- ◆ Lead: Plated lead, solderable per MIL-STD-202E method 208C
- ◆ Mounting position: Any
- ◆ Weight: 0.13 ounces, 3.5 grams



Dimensions in millimeters

Maximum Ratings and Electrical Characteristics

- ◆ Rating at 25°C ambient temperature unless otherwise specified.
- ◆ Single phase, half wave, 60Hz, resistive or inductive load.
- ◆ For capacitive load derate current by 20%.

Parameters	Symbols	GARL2501F GARSL2501F	GARL2502F GARSL2502F	GARL2504F GARSL2504F	GARL2506F GARSL2506F	GARL2508F GARSL2508F	GARL2510F GARSL2510F	GARL2512F GARSL2512F	Units
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	1200	Volts
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	840	Volts
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	1200	Volts
Maximum Average rectified forward current at $T_C=105^\circ\text{C}$	$I_{(AV)}$	25							Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300							Amps
Rating for fusing ($t<8.3\text{mS}$)	Pt	374							A°S
Maximum instantaneous forward voltage drop at 35A	V_F	1.10							Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_C=150^\circ\text{C}$	I_R	5.0 0.5							μA mA
Typical thermal resistance	R_{JUL}	1.0							$^\circ\text{C/W}$
Operating and storage temperature range	T_J, T_{STG}	-65 to +175							$^\circ\text{C}$

Notes: 1. Enough heatsink must be considered in application.

■Ratings and Characteristic Curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

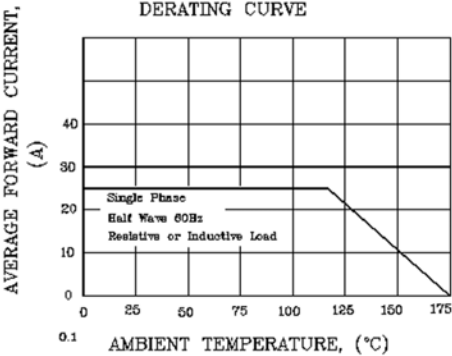


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

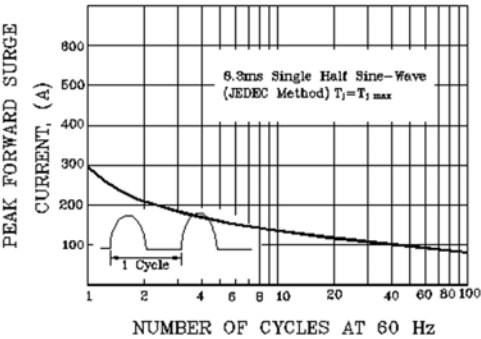


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

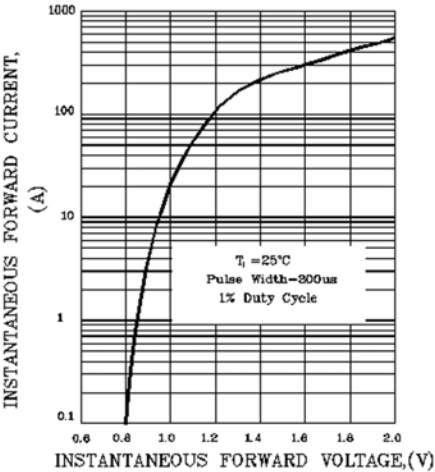


FIG.4- FORWARD POWER DISSIPATION

