LITEON POWER SEMICONDUCTORS

AR25005G thru AR2510G
AR35005G thru AR3510G

25/35 AMPS, GLASS PASSIVATED AUTOMOTIVE RECTIFIERS

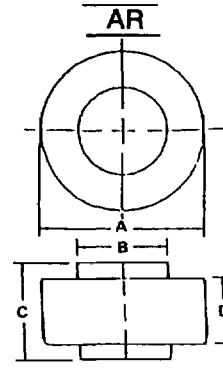
VOLTAGE RANGE
50 to 1000 Volts
CURRENT
25, 35 Amperes

FEATURES

- Low cost
- Glass passivated junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chlorothene and similar solvents
- The plastic material carries U/L recognition 94V-O

MECHANICAL DATA

Case: Molded plastic case
Terminals: Plated terminals solderable per MIL-STD-202, Method 208
Polarity: Color ring denotes cathode
Weight: 0.07 ounce, 1.8 grams
Mounting position: Any



DIM	MM		IN	
	min	max	min	max
A	9.7	10.4	.380	.410
B	5.5	5.7	.215	.225
C	6.0	6.4	.235	.250
D	4.2	4.7	.165	.185\

Dimensions in inches and (millimeters)

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%.

		AR25005G / AR35005G	AR2501G / AR3501G	AR2502G / AR3502G	AR2504G / AR3504G	AR2506G / AR3506G	AR2508G / AR3508G	AR2510G / AR3510G	UNITS
Polarity and Voltage Denotation Color Band		Red	Yellow	Silver	Orange	Green	Blue	Violet	
Maximum Recurrent Peak Reverse Voltage	T_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ T_C=150°C AR25 / AR35	$I_{(AV)}$	25 / 35							A
Peak Forward Surge Current, 8 3 ms Single Half Sine-wave superimposed on rated load (JEDEC method) AR25 / AR35	I_{FSM}	400 / 500							A
Maximum Forward Voltage AR25@I_F 25A / AR35@I_F 35A	V_F	1.0 / 1.0							V
Maximum D.C Reverse Current at Rated D.C Blocking Voltage T_C=25°C / T_C=100°C	I_R	5.0 / 250							μA
Typical Thermal Resistance (Note 1)	$R\theta_{JA}$	1.0							°C/W
Typical Junction Capacitance (Note 2)	C_J	200							pF
Storage and Operating Temperature Range	T_J, T_{STG}	-50 to +175							°C

NOTES: 1. Thermal Resistance from Junction to Ambient
2. Measured at 1 MHz and applied reverse voltage of 4.0 Volts.

FIG. 1 – FORWARD CURRENT DERATING CURVE

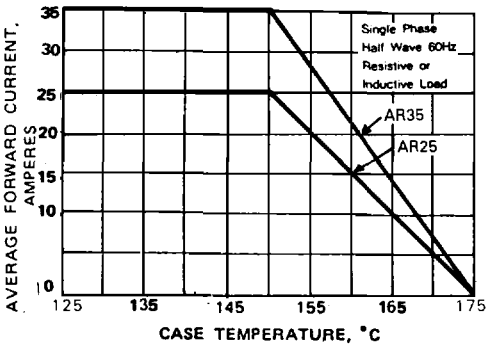


FIG. 3–MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

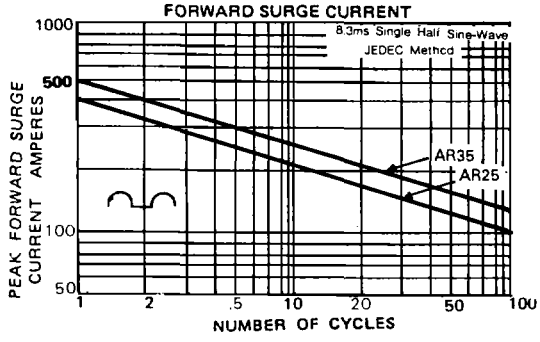


FIG. 2 – TYPICAL FORWARD CHARACTERISTIC

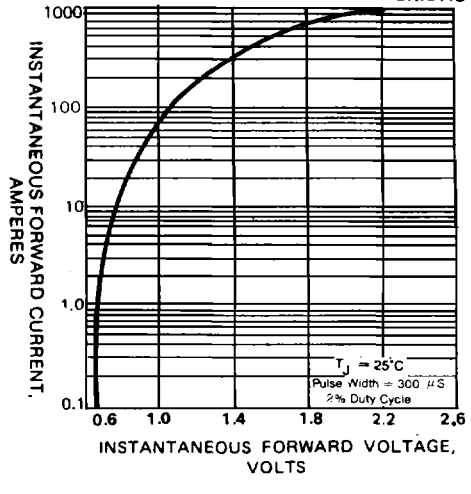


FIG. 4.TYPICAL REVERSE CHARACTERISTIC

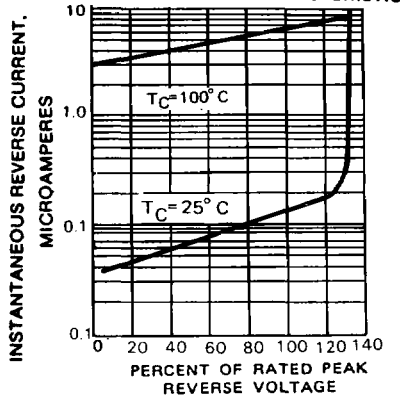


FIG. 5 – TYPICAL JUNCTION CAPACITANCE