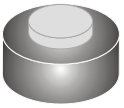
AR3505 THRU AR3510

35.0 AMP SILICON RECTIFIERS

GW



FEATURES

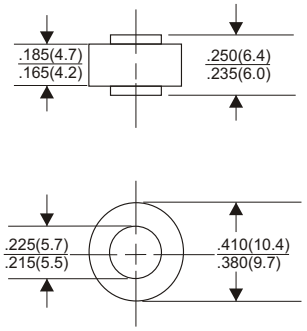
* Low forward voltage drop
* Low leakage current
* High reliability
* High current capability

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Slugs: Plated slugs, solderable per MIL-STD-202
  method 208 guranteed
* Polarity: Color ring denotes cathode end
* Mounting position: Any
* Weight: 1.80 grams

VOLTAGE RANGE
50 to 1000 Volts
CURRENT
35.0 Ampere

AR



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25˚C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	AR3505	AR351	AR352	AR354	AR356	AR358	AR3510	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Tc=150˚C	35.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	400							A
Maximum Instantaneous Forward Voltage at 35.0A	1.0							V
Maximum DC Reverse Current Tc=25˚C	25							A
at Rated DC Blocking Voltage Tc=100˚C	500							A
Typical Junction Capacitance (Note 1)	350							pF
Typical Thermal Resistance R JA (Note 2)	1.0							˚C/W
Operating and Storage Temperature Range T_J, T_{STG}	-65 — +175							˚C
Cathode Band Color	Red	Yellow	Silver	Orange	Green	Blue	Violet	

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient .375" (9.5mm) lead length.

RATING AND CHARACTERISTIC CURVES (AR3505 THRU AR3510)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

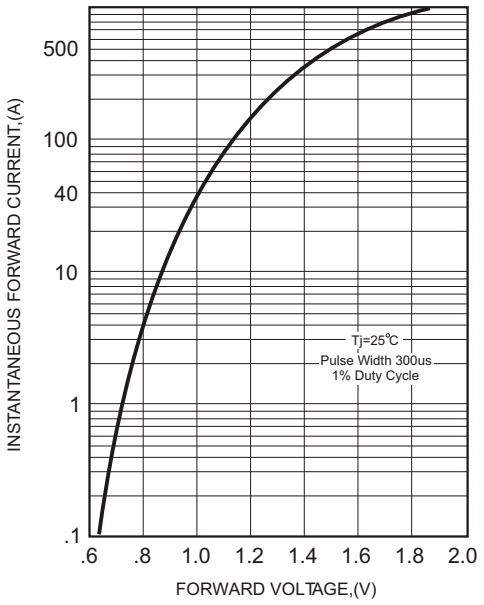


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

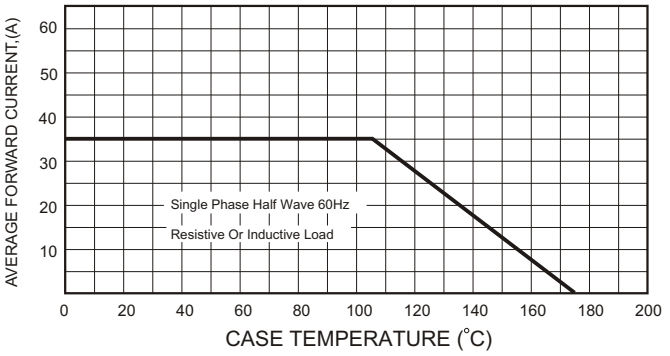


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

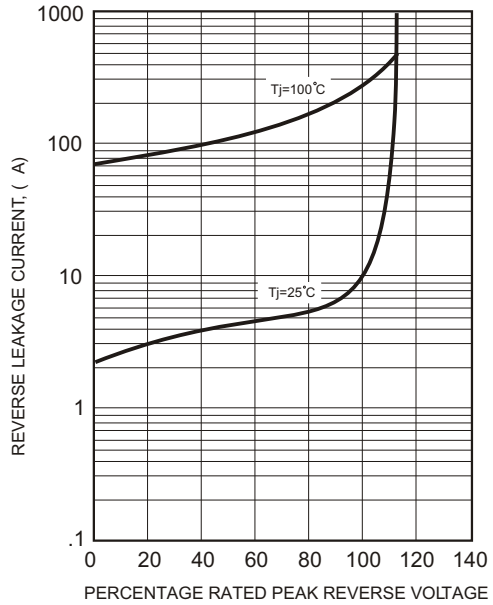


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

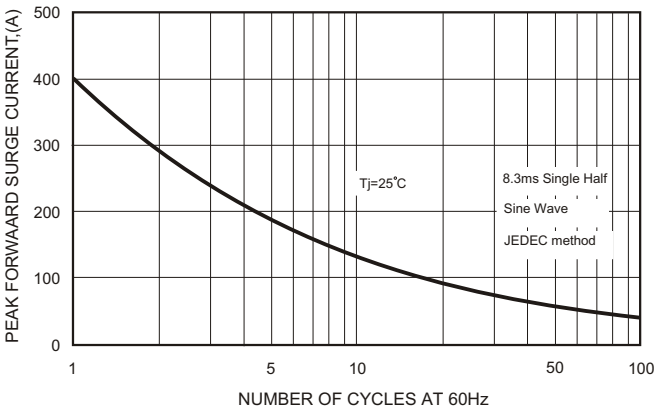


FIG.5-TYPICAL JUNCTION CAPACITANCE