

AR2505 THRU AR2510



25.0 AMP SILICON RECTIFIERS



FEATURES

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

MECHANICAL DATA

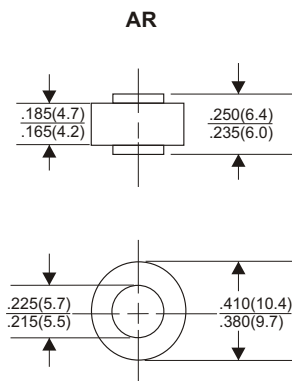
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Slugs: Plated slugs, solderable per MIL-STD-202 method 208 guaranteed
- * Polarity: Color ring denotes cathode end
- * Mounting position: Any

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

25.0 Amperes



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	AR2505	AR251	AR252	AR254	AR256	AR258	AR2510	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 T _c =150°C								25.0	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 25.0A								1.0	V
Maximum DC Reverse Current T _c =25°C								25	μA
at Rated DC Blocking Voltage T _c =100°C								500	μA
Typical Junction Capacitance (Note 1)								300	pF
Typical Thermal Resistance R _{θJC} (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 Case.

RATING AND CHARACTERISTIC CURVES (AR2505 THRU AR2510)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

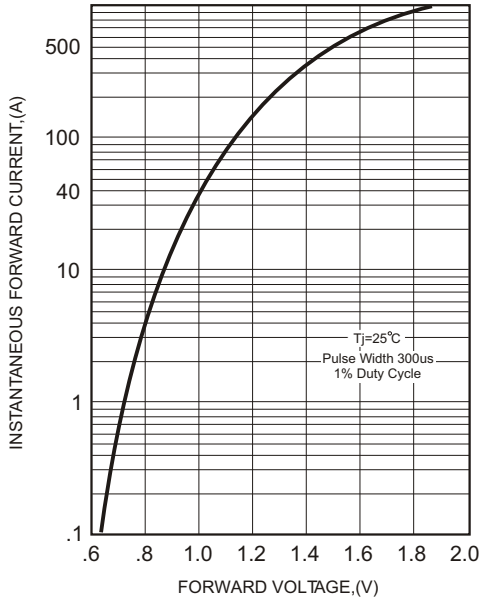


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

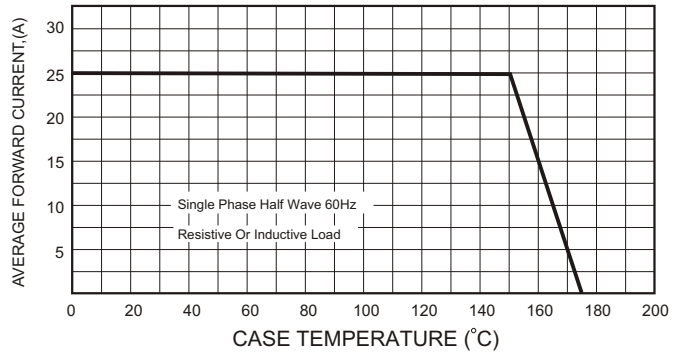


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

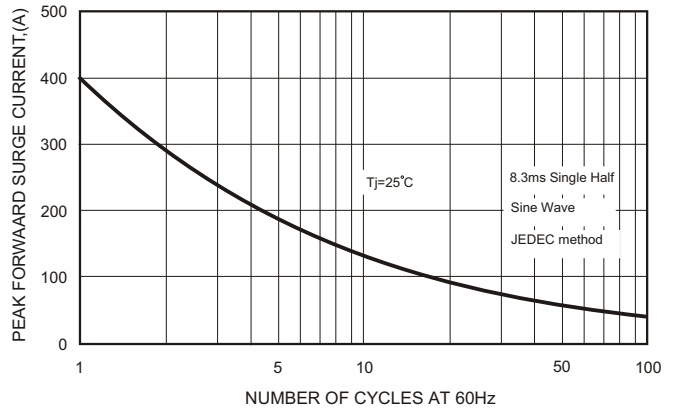


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

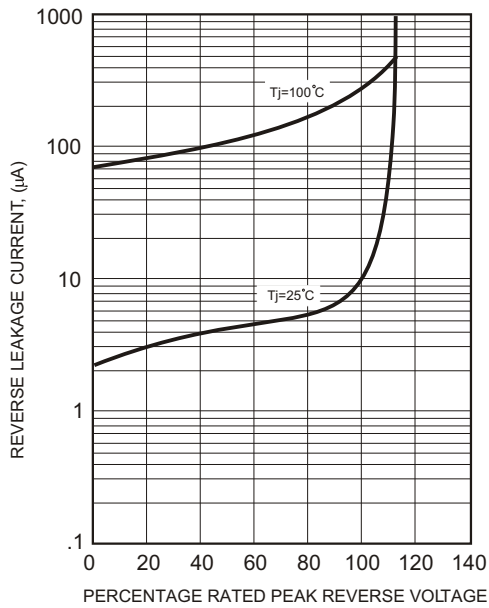


FIG.5-TYPICAL JUNCTION CAPACITANCE

