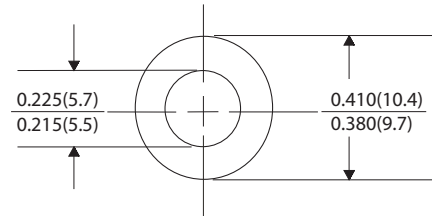
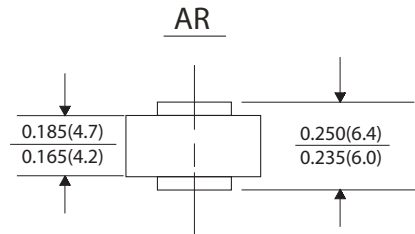


## AR3505 THRU AR3510

CURRENT 35.0 Amperes  
VOLTAGE 50 to 1000 Volts

### Features

- Plastic material used carries Underwriters Laboratory Classification 94V-0
- Low cost construction utilizing void-free molded plastic technique
- Low cost
- Diffused junctions
- Low leakage
- High surge capability
- High temperature soldering guaranteed : 250°C for 10 seconds



Dimensions in inches and (millimeters)

### Mechanical Data

- Case : AR molded plastic
- Terminals : Plated terminals, solderable per MIL-STD-750, method 208
- Polarity : Color ring denotes cathode end
- Mounting Position : Any
- Weight : 0.07 ounce, 1.8 gram

### 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 by 20%)

	Symbols	AR 3505	AR 351	AR 352	AR 354	AR 356	AR 358	AR 3510	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_C=150^\circ\text{C}$	$I_{(AV)}$	35.0							Amps
Peak forward surge current 8.3ms half sine wave superimposed on rated load (JEDEC method) $T_J=150^\circ\text{C}$	$I_{FSM}$	500							Amps
Maximum instantaneous forward voltage at 35.0A	$V_F$	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage	$T_C=25^\circ\text{C}$	5.0							$\mu\text{A}$
	$T_C=100^\circ\text{C}$	250							
Typical reverse recovery time (Note 2)	$t_{rr}$	3.0							$\mu\text{S}$
Typical junction capacitance (Note 1) $T_J=25^\circ\text{C}$	$C_J$	300							pF
Typical thermal resistance (Note 3)	$R_{\theta JC}$	1.0							$^\circ\text{C}/\text{W}$
Operating and storage temperature range	$T_J$ $T_{STG}$	-50 to +175							$^\circ\text{C}$

#### Notes:

- (1) Measured at 1MHz and applied reverse voltage of 4.0V dc.
- (2) Reverse recovery test conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$
- (3) Thermal resistance from junction to case, single side cooled.



# RATINGS AND CHARACTERISTIC CURVES AR3505 THRU AR3510

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

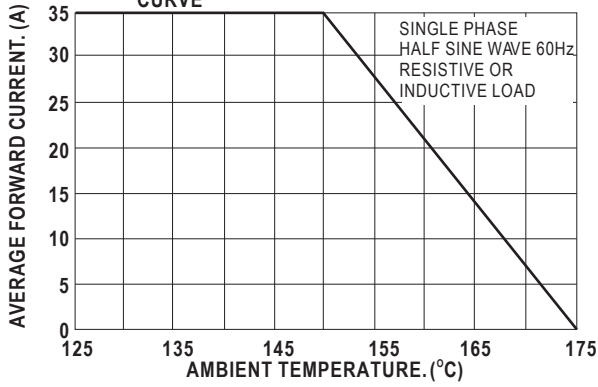


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

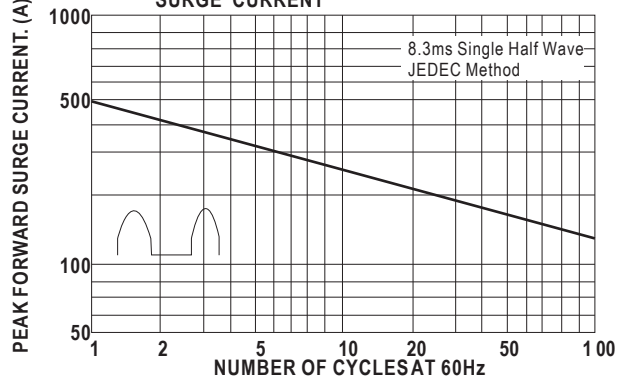


FIG.3- TYPICAL FORWARD CHARACTERISTICS

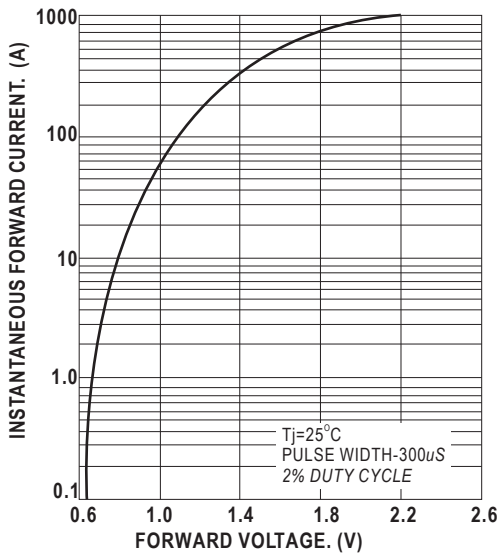


FIG.4- TYPICAL REVERSE CHARACTERISTICS

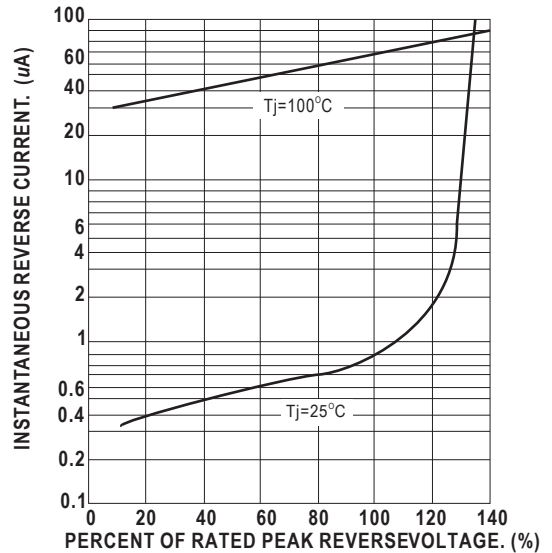


FIG.5- TYPICAL JUNCTION CAPACITANCE

