

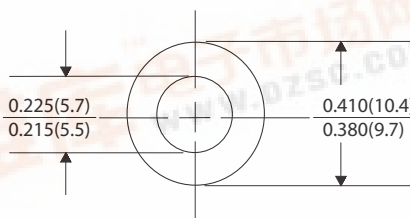
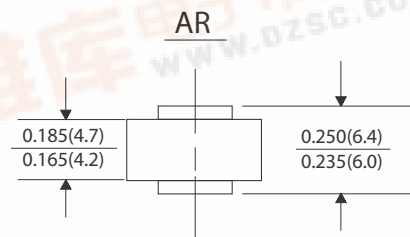
DEC

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 °C		I(AV)	35.0							Amps
Peak forward surge current 8.3ms half sine wave superimposed on rated load (JEDEC method) T _J =150 °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 °C	I _R	5.0							μA
	T _C =100 °C		250							
Typical reverse recovery time (Note 2)		t _{rr}	3.0							μS
Typical junction capacitance (Note 1) T _J =25 °C		C _J	300							pF
Typical thermal resistance (Note 3)		RθJC	1.0							°C/W
Operating and storage temperature range		T _J T _{STG}	-50 to +175							°C

Notes:

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



RATINGS AND CHARACTERISTIC CURVES AR3505 THRU AR3510

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

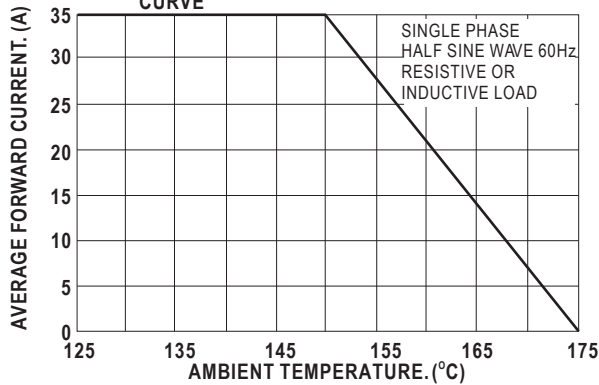


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

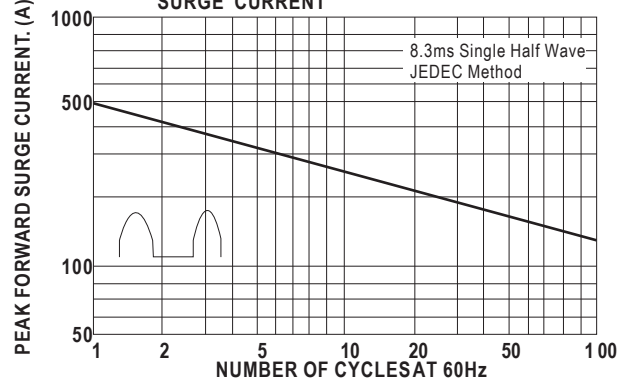


FIG.3- TYPICAL FORWARD CHARACTERISTICS

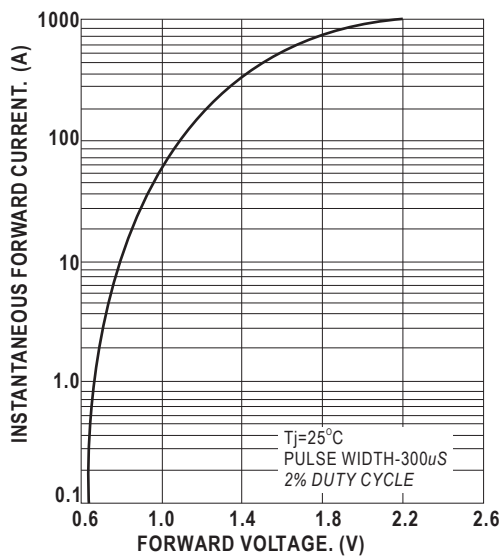


FIG.4- TYPICAL REVERSE CHARACTERISTICS

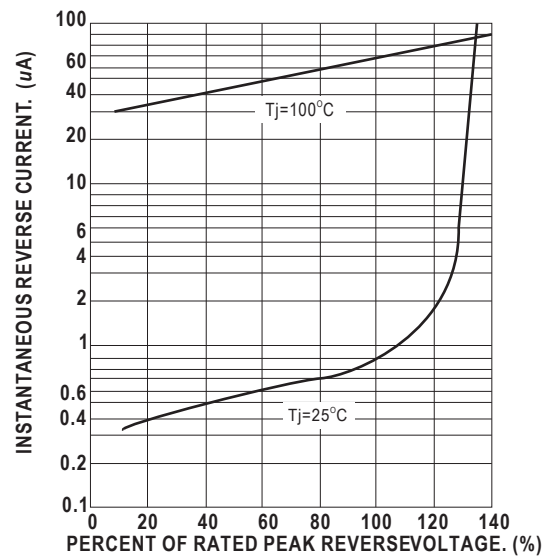


FIG.5- TYPICAL JUNCTION CAPACITANCE

