



# AR3504G THRU AR3506G

Automotive Button Diode

## Features

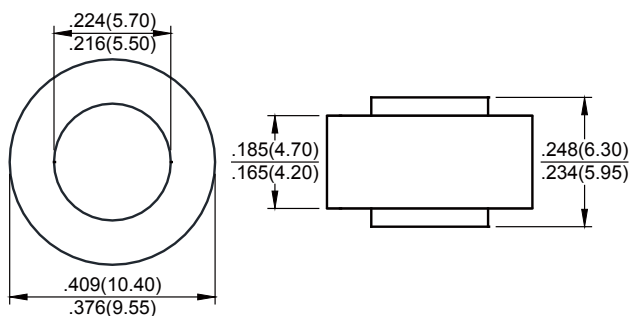
- \* Glass passivated chip
- \* Low leakage
- \* Low cost
- \* Low forward voltage drop
- \* High current capability
- \* High surge current capability

## Mechanical Data

- \* Case: Molded plastic, AR
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solderable per MIL-STD-202, method 208
- \* Polarity: Color ring denotes cathode
- \* Mounting position: Any

**Voltage Range 400 to 600 V**  
**Current 35 Ampere**

**AR**



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	AR3504G	AR3506G	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	400	600	V
Maximum RMS voltage	$V_{RMS}$	280	420	V
Maximum DC blocking voltage	$V_{DC}$	400	600	V
Maximum average forward rectified current @ $T_A=55^\circ\text{C}$	$I_{F(AV)}$	35		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	400		A
Maximum instantaneous forward voltage @ $I_F=80\text{A}$	$V_F$	1.1		V
Maximum DC reverse current at rated DC blocking voltage @ $T_A=25^\circ\text{C}$ @ $T_A=100^\circ\text{C}$	$I_R$	5 500		$\mu\text{A}$
Typical thermal resistance from junction to case	$R_{\theta JC}$	1.2		$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-45 to +150		$^\circ\text{C}$
Position of polarity ring denotes cathode, while color denotes voltage gradation.		Silver	Green	

# RATINGS AND CHARACTERISTICS CURVES AR3504G THRU AR3506G

Fig.1 - Forward Current Derating Curve

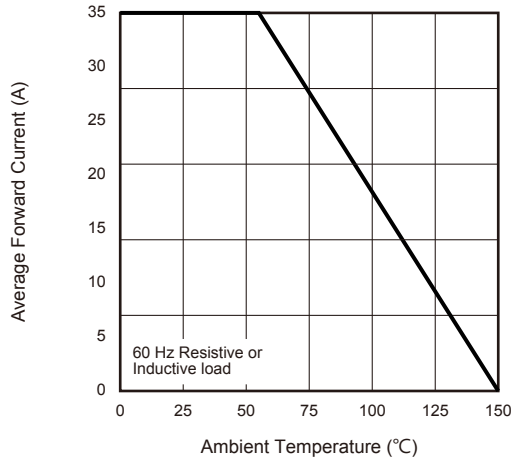


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

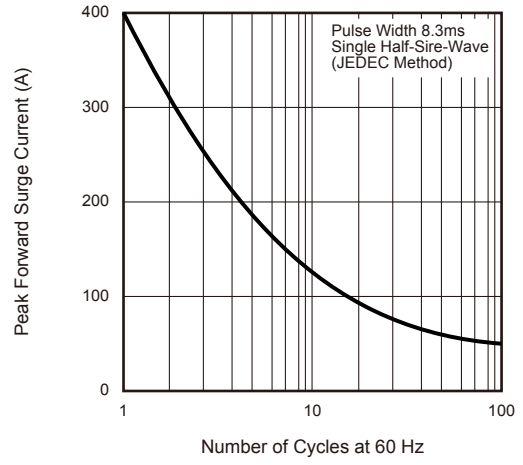


Fig.3 - Typical Instantaneous Forward Characteristics

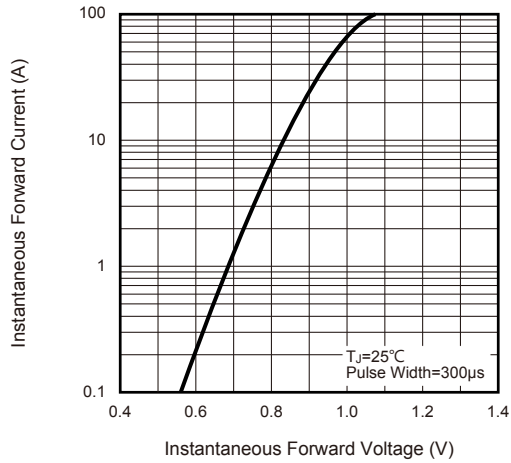


Fig.4 - Typical Reverse Leakage Characteristics

