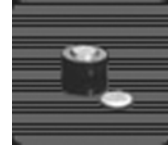


Features

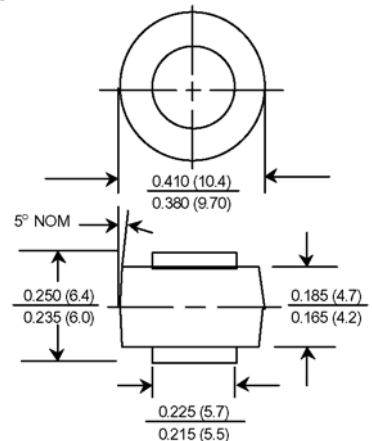
- ◆ High current capability
- ◆ High surge current capability
- ◆ High reliability
- ◆ Low reverse current
- ◆ Low forward voltage drop



Mechanical Data

- ◆ Case : Molded plastic
- ◆ Epoxy : UL94V-0 rate flame retardant
- ◆ Terminals : Terminal are readily solderable
- ◆ Polarity : Cathode polarity band
- ◆ Mounting position : Any
- ◆ Weight : 1.84 grams

AR



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Parameter	Symbols	AR 5000	AR 5001	AR 5002	AR 5004	AR 5006	AR 5008	AR 5010	Units
Maximum repetitive 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
Average rectified forward current $T_C=150^\circ\text{C}$	$I_{F(AV)}$	50.0							Amps
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	500.0							Amps
Maximum forward voltage at $I_F=50$ Amperes.	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	5.0 1.0							μA mA
Typical thermal resistance (Note 1)	$R_{\theta JC}$	0.8							$^\circ\text{C/W}$
Operating junction temperature range	T_J	-65 to +175							$^\circ\text{C}$
Storage temperature range	T_{STG}	-65 to +175							$^\circ\text{C}$

Notes: 1. Thermal resistance from junction to case. Single side cooled.

RATINGS AND CHARACTERISTIC CURVES

