

AR351/ARS351
THRU
AR356/ARS356

Features

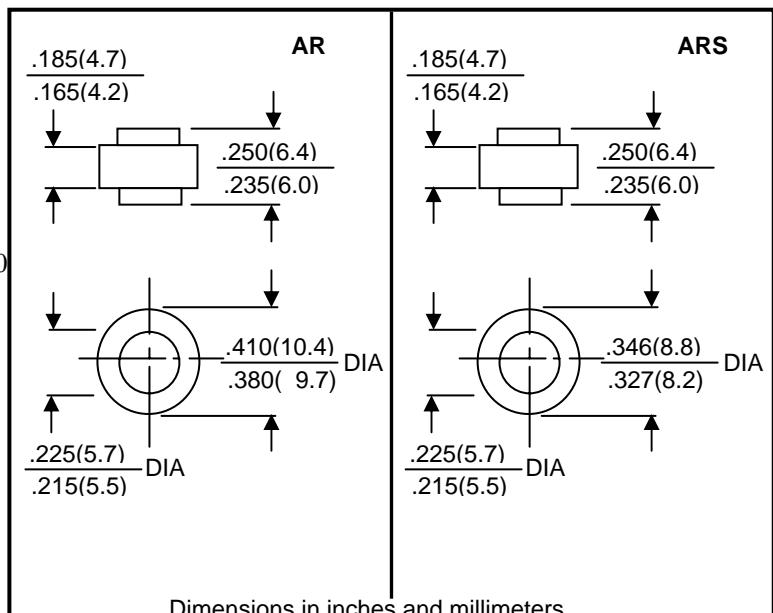
- Low leakage
- Low forward voltage drop
- High current capability
- High forward surge current capability

BUTTON DIODES

VOLTAGE RANGE
100 TO 600 VOLTS
CURRENT 35AMPS

Mechanical Data

- Case: transfer molded plastic
- Technology: vacuum soldered
- Polarity: color ring denotes cathode
- Lead: Plated lead, solderable per MIL-STD-202E method 20
- Mounting position: Any
- Weight: AR 1.80 grams, ARS 1.60 grams



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%

Parameters	Symbols	AR351 ARS351	AR352 ARS352	AR353 ARS353	AR354 ARS354	AR356 ARS356	Units
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	300	400	600	Volts
Maximum RMS voltage	V_{RMS}	70	140	210	280	420	Volts
Maximum DC blocking voltage	V_{DC}	100	200	300	400	600	Volts
Maximum Average rectified forward current at $T_C=110^\circ\text{C}$	I_o			35			Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (JE DEC Method)	I_{FSM}			400			Amps
Rating for fusing($t < 8.3\text{ms}$)	I^2t			664			A^2s
Maximum instantaneous forward voltage drop at 100A	V_F			1.1			Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=150^\circ\text{C}$	I_R			5.0			μA
Typical thermal resistance	$R_{\theta JC}$			450			
Operating and storage temperature	T_J, T_{STG}			1.0			$^\circ\text{C}/\text{W}$
				-65 to +175			$^\circ\text{C}$

Notes: 1. Enough heatsink must be considered in application.

AR351 THRU AR356 ARS351 THRU ARS356

Ratings and Characteristic Curves

FIG.1—TYPICAL FORWARD CURRENT DERATING CURVE

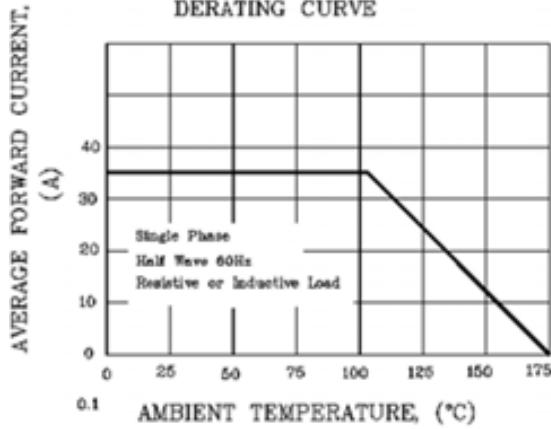


FIG.2—MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

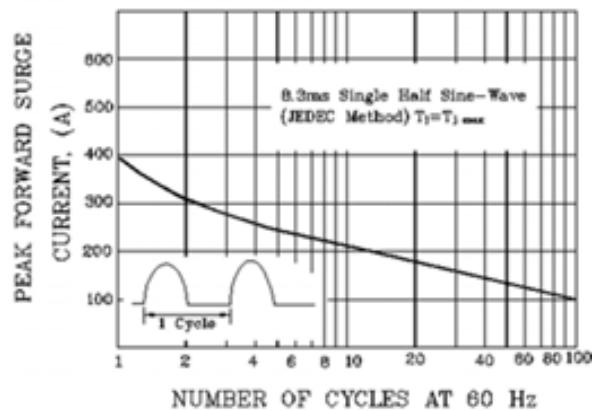


FIG.3—TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

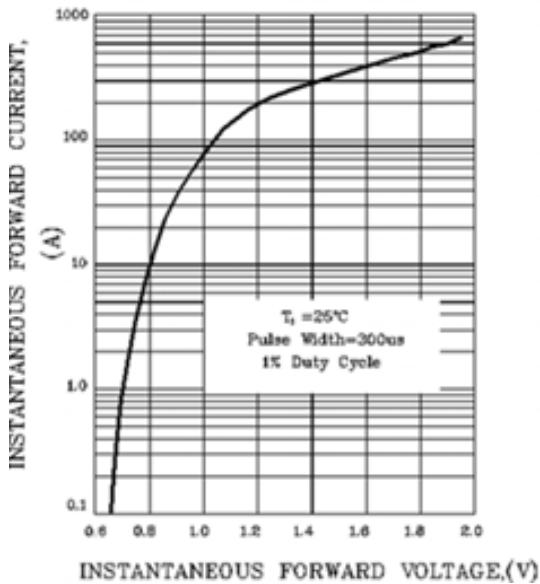


FIG.4—FORWARD POWER DISSIPATION

