

# **AR/S35A - AR/S35M**

## 35A AUTOMOTIVE BUTTON DIODE

#### **Features**

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Low Cost Construction Utilizing Void-Free Molded Plastic Technique

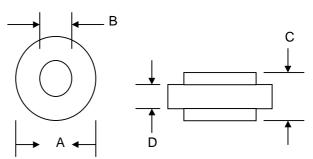
### **Mechanical Data**

Case: Molded Plastic

 Terminals: Plated Terminals Solderable per MIL-STD-202, Method 208

Polarity:Color Ring Denotes Cathode End

Weight: 1.8 grams (approx.)
 Mounting Position: Any
 Marking: Color Band



	AR		ARS			
Dim	Min	Max	Min	Max		
Α	9.70	10.40	8.30	8.90		
В	5.50	5.70	5.50	5.70		
С	6.0	6.40	6.0	6.40		
D	4.2	4.7	4.2	4.7		
All Dimensions in mm						

S Suffix Designates ARS Package No Suffix Designates AR Package

## Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	AR/S 35A	AR/S 35B	AR/S 35D	AR/S 35G	AR/S 35J	AR/S 35K	AR/S 35M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current @T <sub>C</sub> = 150°C	С Ю	35					Α		
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) at $T_J = 150$ °C	IFSM	500				А			
Forward Voltage @I <sub>F</sub> = 35A	VFM	1.0				V			
Peak Reverse Current $@T_A = 25^{\circ}$ 0 At Rated DC Blocking Voltage $@T_A = 100^{\circ}$ 0	I IRM				5.0 250				μΑ
Reverse Recovery Time (Note 1)	trr	3.0				μS			
Typical Junction Capacitance (Note 2)	Cj	300					pF		
Typical Thermal Resistance Junction to Case (Note 3)	R <sub>θ</sub> JC	1.0				K/W			
Operating and Storage Temperature Range	TJ, Tsтg	-50 to +175					°C		
Polarity and Voltage Denotation Color Band		Red	Yellow	Silver	Orange	Green	Blue	Violet	

#### \*Glass passivated forms are available upon request

- Note: 1. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A
  - 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
  - 3. Thermal Resistance: Junction to case, single side cooled.

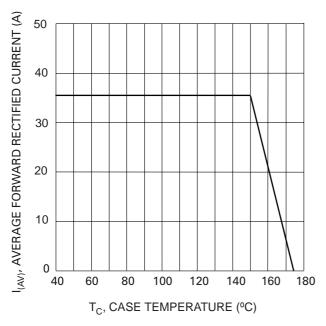
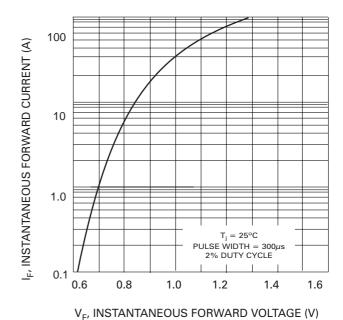


Fig. 1 Forward Current Derating Curve



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLIAGE (V

Fig. 2 Typical Forward Characteristics

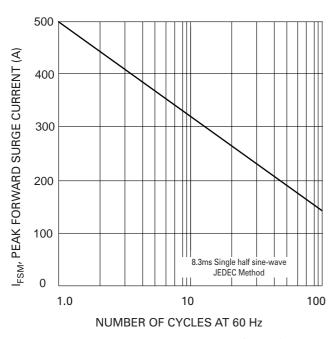


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

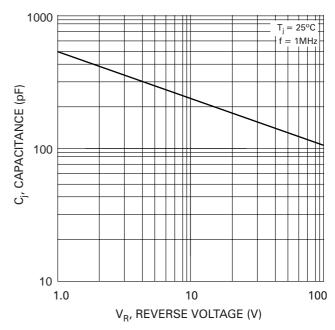


Fig. 4 Typical Junction Capacitance

#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity				
AR35A	10mm Button	1000 Units/Box				
ARS35A	8.6mm Button	1000 Units/Box				
AR35B	10mm Button	1000 Units/Box				
ARS35B	8.6mm Button	1000 Units/Box				
AR35D	10mm Button	1000 Units/Box				
ARS35D	8.6mm Button	1000 Units/Box				
AR35G	10mm Button	1000 Units/Box				
ARS35G	8.6mm Button	1000 Units/Box				
AR35J	10mm Button	1000 Units/Box				
ARS35J	8.6mm Button	1000 Units/Box				
AR35K	10mm Button	1000 Units/Box				
ARS35K	8.6mm Button	1000 Units/Box				
AR35M	10mm Button	1000 Units/Box				
ARS35M	8.6mm Button	1000 Units/Box				

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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