

# AR/S35A – AR/S35M

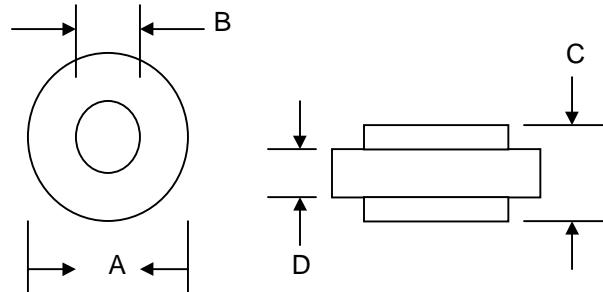
## 35A AUTOMOTIVE BUTTON DIODE

### 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



Dim	AR		ARS	
	Min	Max	Min	Max
A	9.70	10.40	8.30	8.90
B	5.50	5.70	5.50	5.70
C	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 @T<sub>A</sub>=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	V <sub>RRM</sub>								
Working Peak Reverse Voltage	V <sub>RWM</sub>								
DC Blocking Voltage	V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @T <sub>C</sub> = 150°C	I <sub>o</sub>				35				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) at T <sub>J</sub> = 150°C	I <sub>FSM</sub>				500				A
Forward Voltage @I <sub>F</sub> = 35A	V <sub>FM</sub>				1.0				V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>				5.0	250			µA
Reverse Recovery Time (Note 1)	t <sub>rr</sub>				3.0				µS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>				300				pF
Typical Thermal Resistance Junction to Case (Note 3)	R <sub>θJC</sub>				1.0				K/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>				-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.

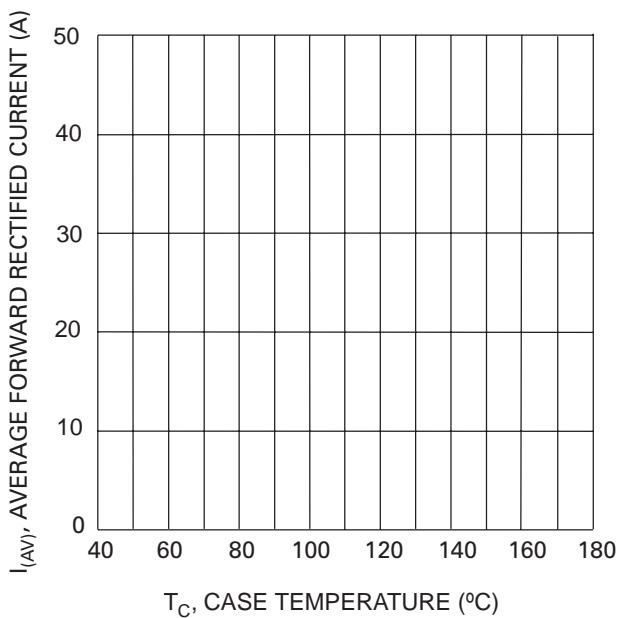


Fig. 1 Forward Current Derating Curve

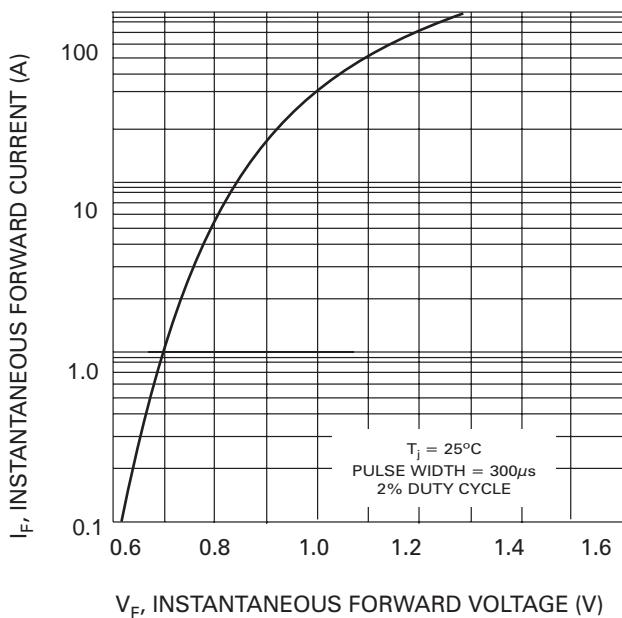


Fig. 2 Typical Forward Characteristics

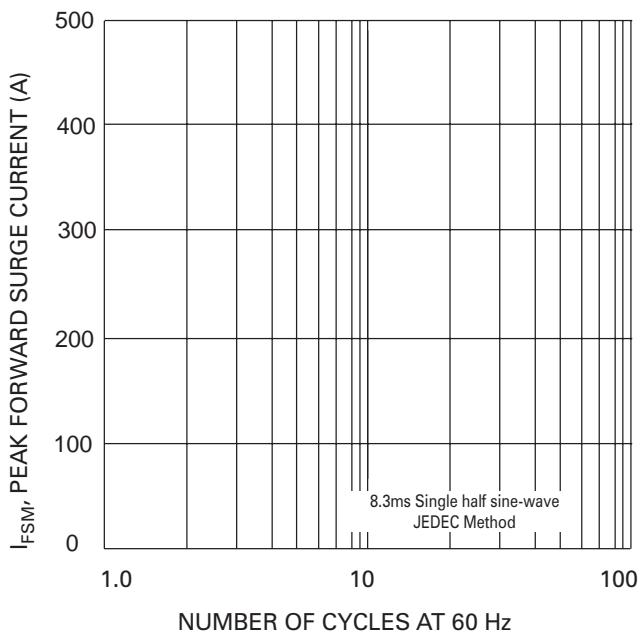


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

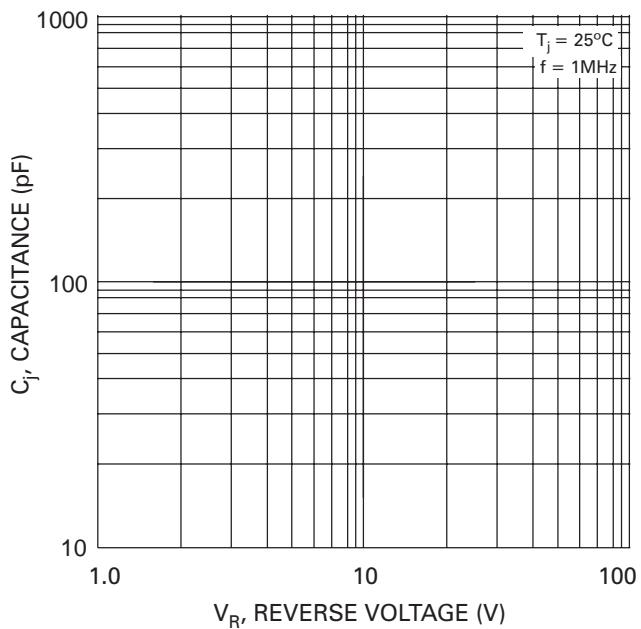


Fig. 4 Typical Junction Capacitance

## 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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