

AR/S35A – AR/S35M



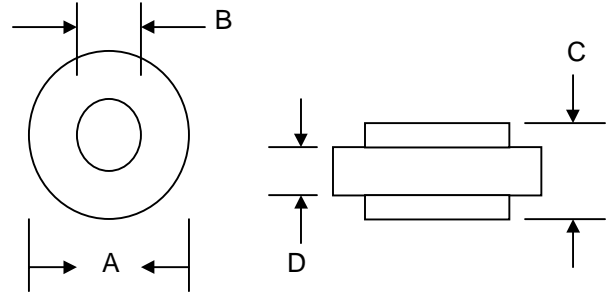
35A AUTOMOTIVE BUTTON DIODE

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 @ $T_A=25^\circ\text{C}$ 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	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C = 150^\circ\text{C}$	I_O	35							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) at $T_J = 150^\circ\text{C}$	I_{FSM}	500							A
Forward Voltage @ $I_F = 35\text{A}$	V_{FM}	1.0							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	5.0 250							μA
Reverse Recovery Time (Note 1)	t_{rr}	3.0							μS
Typical Junction Capacitance (Note 2)	C_j	300							pF
Typical Thermal Resistance Junction to Case (Note 3)	$R_{\theta JC}$	1.0							K/W
Operating and Storage Temperature Range	T_J, T_{STG}	-50 to +175							$^\circ\text{C}$
Polarity and Voltage Denotation Color Band		Red	Yellow	Silver	Orange	Green	Blue	Violet	

*Glass passivated forms are available upon request

- Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $IRR = 0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Thermal Resistance: Junction to case, single side cooled.

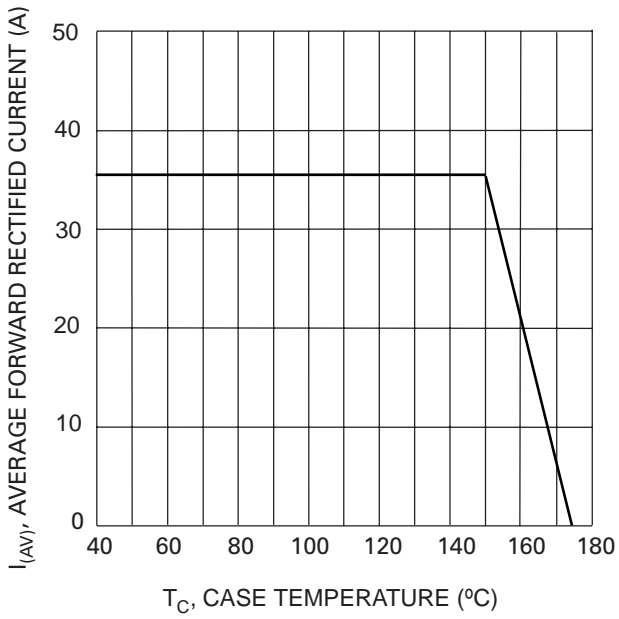


Fig. 1 Forward Current Derating Curve

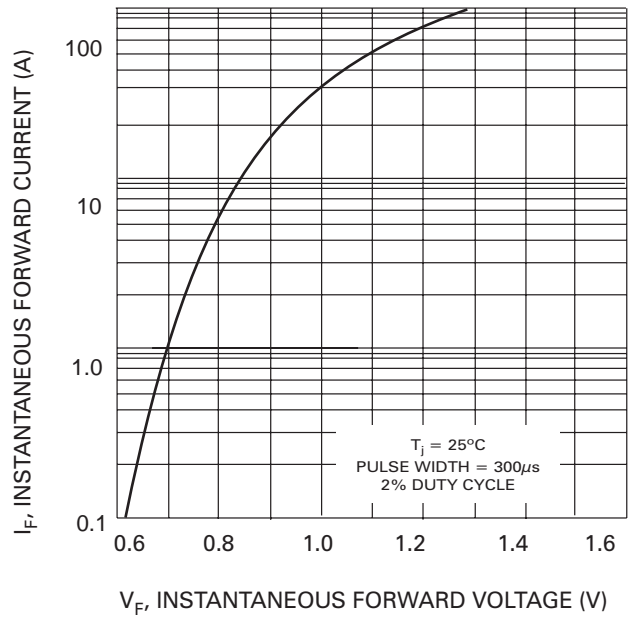


Fig. 2 Typical Forward Characteristics

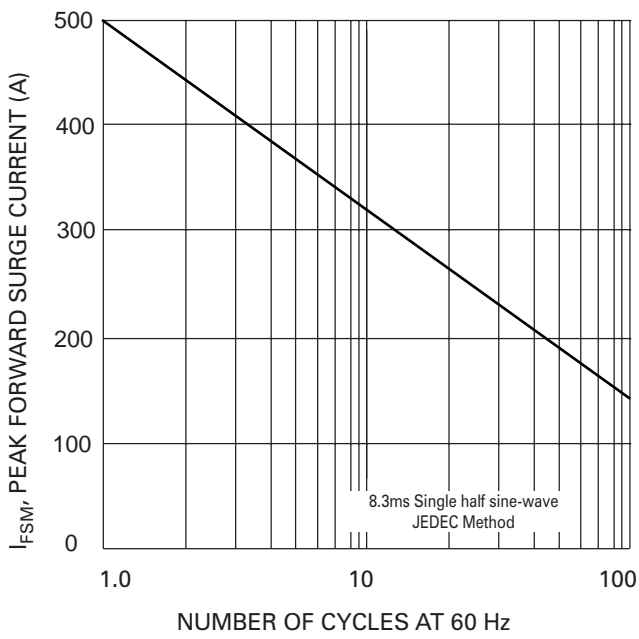


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

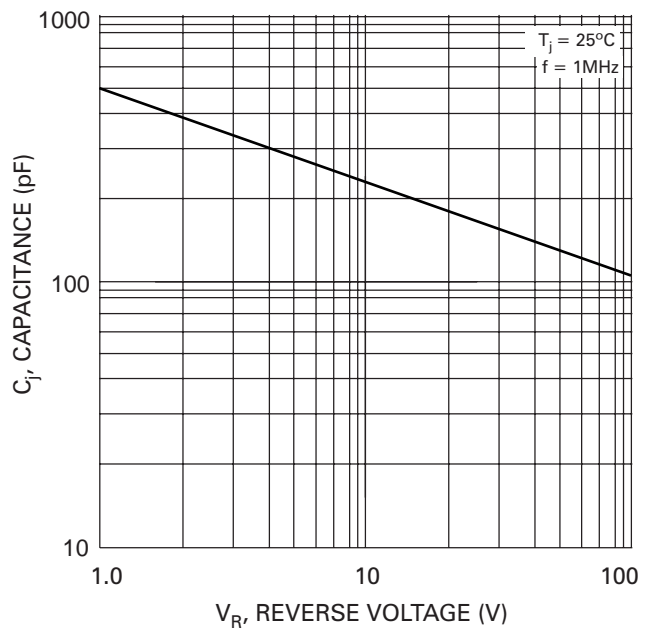


Fig. 4 Typical Junction Capacitance

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.