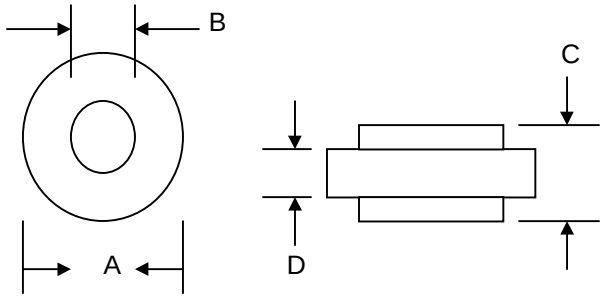
AR/S25A – AR/S25M

25A AUTOMOTIVE BUTTON DIODE

Features

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



	AR		ARS	
Dim	**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

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

Maximum Ratings and Electrical Characteristics @T_A=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 25A	AR/S 25B	AR/S 25D	AR/S 25G	AR/S 25J	AR/S 25K	AR/S 25M	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°C	I_O	25							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) at T_J = 150°C	I_{FSM}	400							A
Forward Voltage @I_F = 25A	V_{FM}	1.0							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°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							°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.

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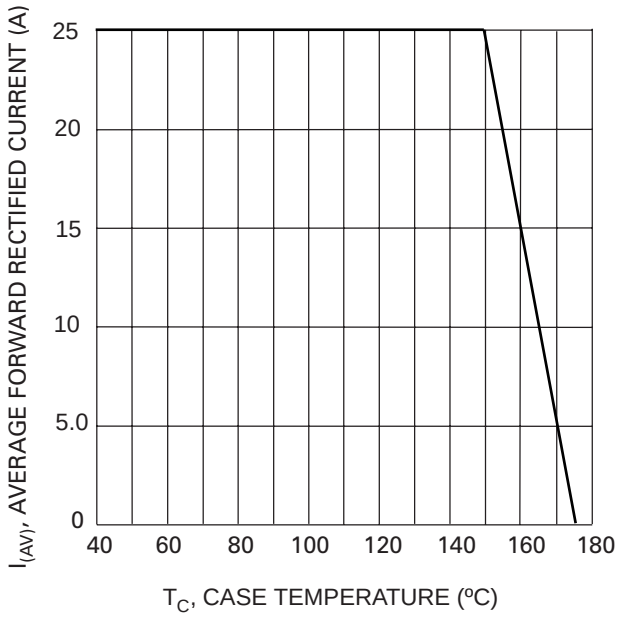

Fig. 1 Forward Current Derating Curve

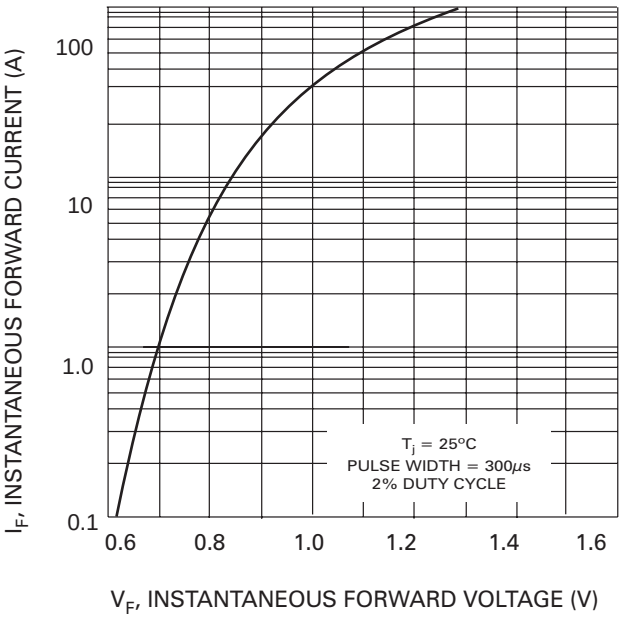

Fig. 2 Typical Forward Characteristics

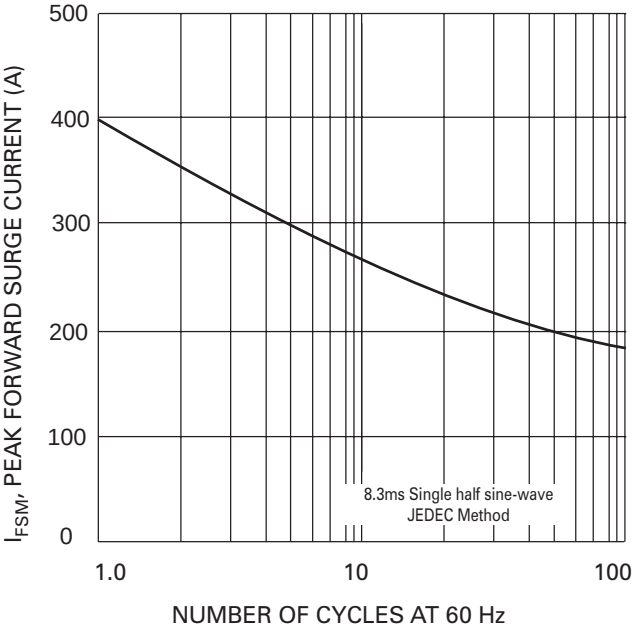

Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

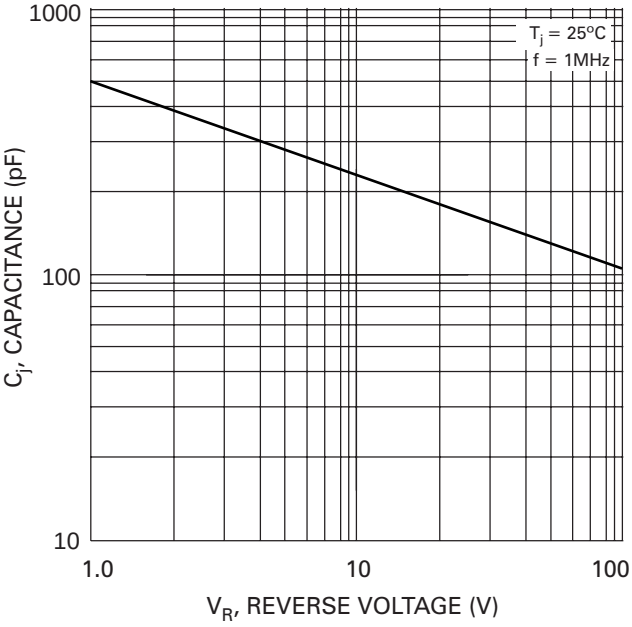

Fig. 4 Typical Junction Capacitance

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
AR25A	10mm Button	1000 Units/Box
ARS25A	8.6mm Button	1000 Units/Box
AR25B	10mm Button	1000 Units/Box
ARS25B	8.6mm Button	1000 Units/Box
AR25D	10mm Button	1000 Units/Box
ARS25D	8.6mm Button	1000 Units/Box
AR25G	10mm Button	1000 Units/Box
ARS25G	8.6mm Button	1000 Units/Box
AR25J	10mm Button	1000 Units/Box
ARS25J	8.6mm Button	1000 Units/Box
AR25K	10mm Button	1000 Units/Box
ARS25K	8.6mm Button	1000 Units/Box
AR25M	10mm Button	1000 Units/Box
ARS25M	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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