



AR/S25A – AR/S25M

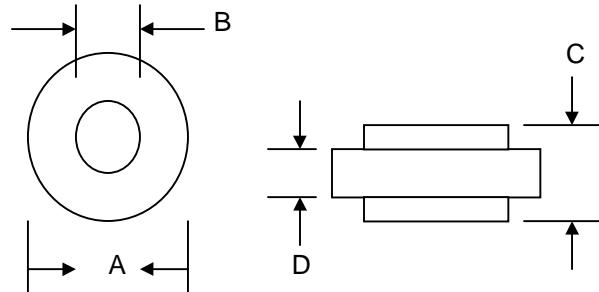
25A AUTOMOTIVE BUTTON DIODE

Features

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

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°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	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current <small>@T_C = 150°C</small>	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 <small>@I_F = 25A</small>	V _{FM}				1.0				V
Peak Reverse Current <small>@T_A = 25°C</small> At Rated DC Blocking Voltage <small>@T_A = 100°C</small>	I _{RM}				5.0				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 _{θJC}				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.

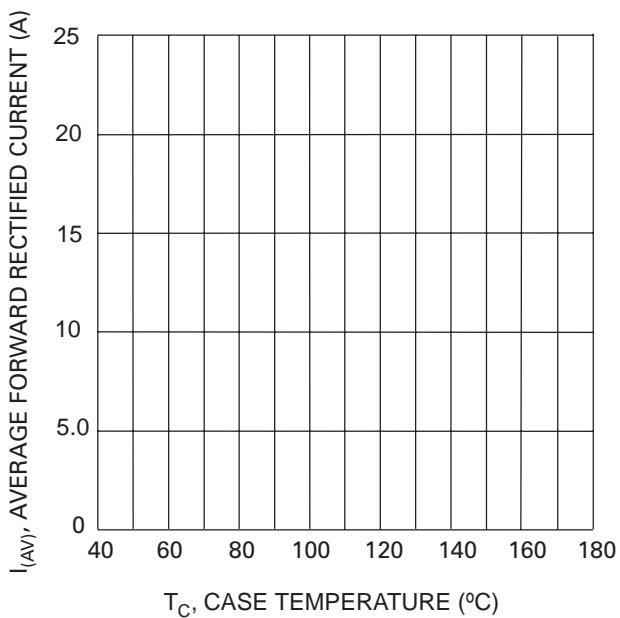


Fig. 1 Forward Current Derating Curve

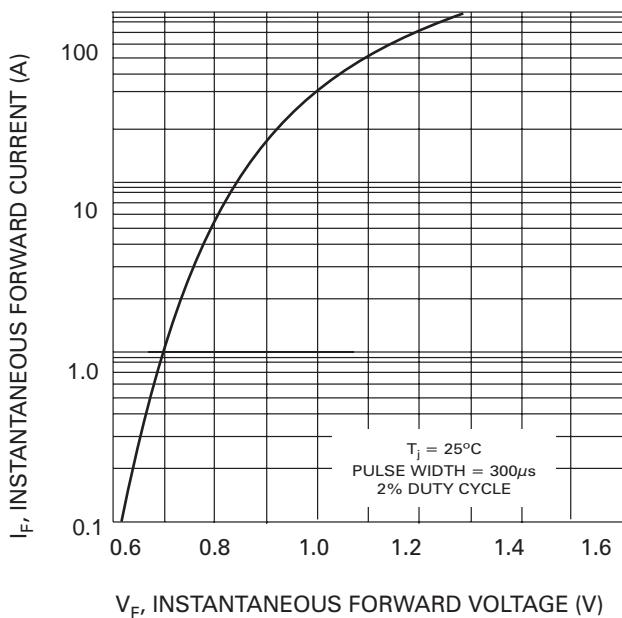


Fig. 2 Typical Forward Characteristics

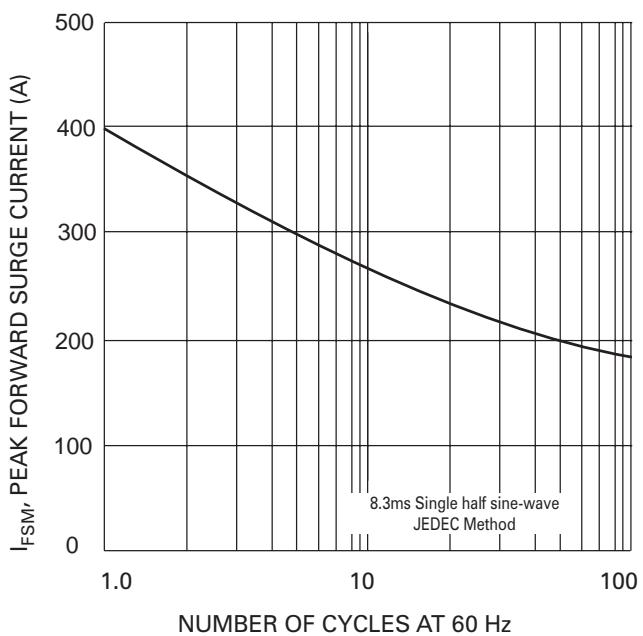


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

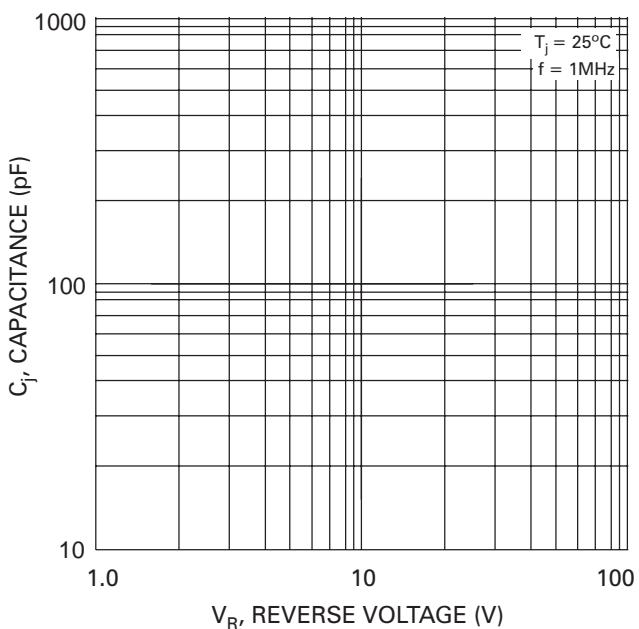


Fig. 4 Typical Junction Capacitance

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
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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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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