

## High Current Automobile Rectifier

**Reverse Voltage - 50 to 1000Volts**  
**Forward Current - 35 Amperes**

### Features

- Better heat dissipation
- Low power loss
- High surge forward current capability
- High temperature soldering guaranteed: 265 °C/10S

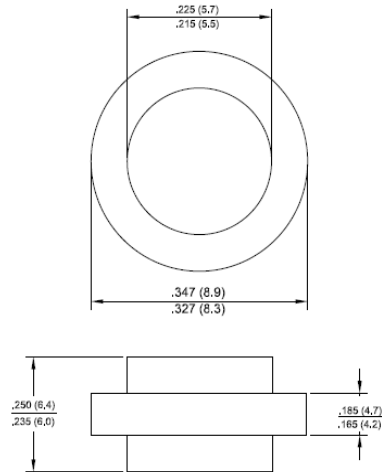
### Mechanical Data

- Case: JEDEC ARS molded plastic
- Polarity: Color band denotes cathode

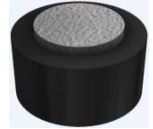
### Applications

- Generally applied in alternator, motorbike , automobile, etc.

ARS



RoHS  
COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	ARS35A	ARS35B	ARS35D	ARS35G	ARS35J	ARS35K	ARS35M	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=55 °C	I(AV)	35							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	600							A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	1494							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage at Rated Forward Current	VF	1.1							V
Maximum DC Reverse Current at Rated @TJ=25°C	IR	10							uA
DC Bolcking Voltage @TJ=150°C		1000							
Typical Junction Capacitance (Note1)	CJ	300							pF
Typical Thermal Resistance Junction to Ambient	RθJA	1.0							°C/W
Operating Junction Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TSTG	-55 to +150							°C
Position of polarity ring denotes cathode, while color denotes voltage gradation.		Red	Yellow	Orange	Silver	Green	Blue	Purple	

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2.The typical data above is for reference only

Fig. 1 - Forward Current Derating Curve

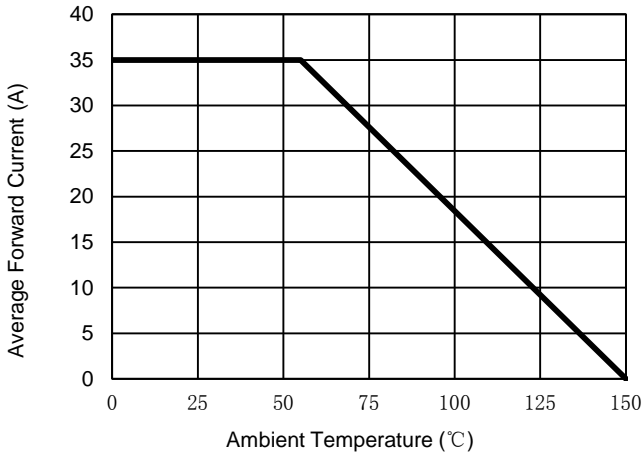


Fig. 2 - Maximum Non-Repetitive Surge Current

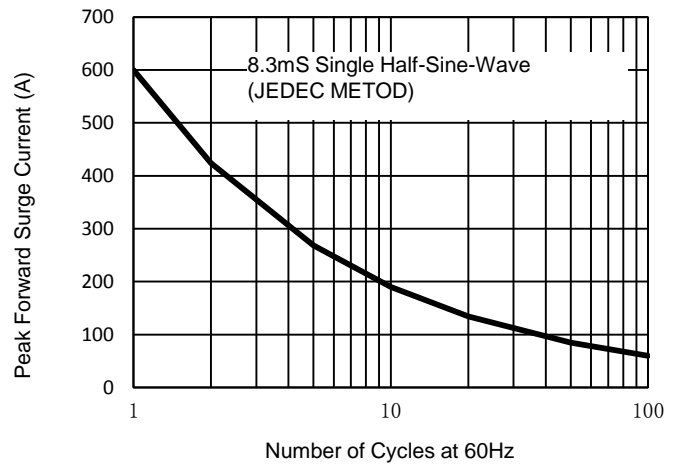


Fig. 3 - Typical Reverse Characteristics

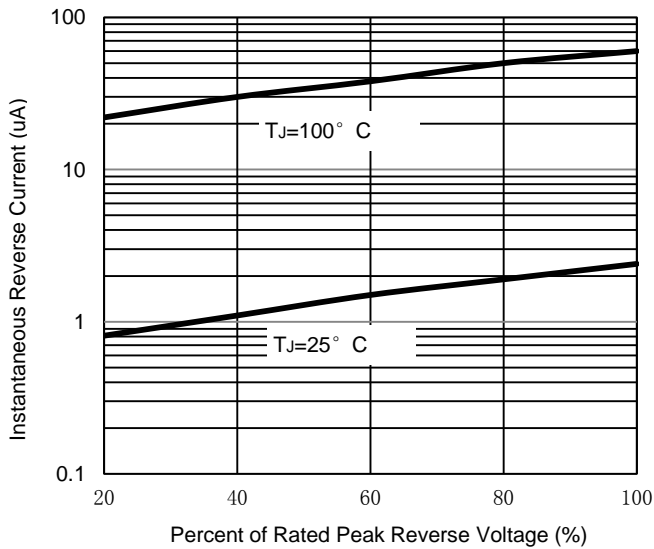


Fig. 4 - Typical Forward Characteristics

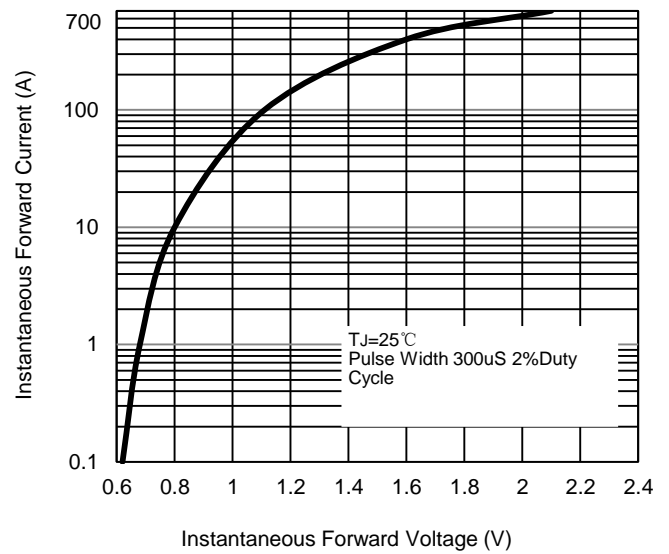
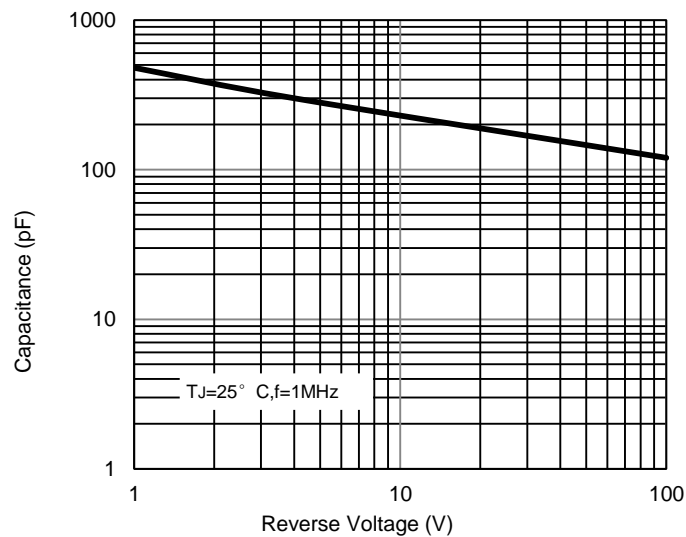


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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