



# ARS25A-ARS25M, AR25A-AR25M

<b>HIGH CURRENT AUTOMOBILE RECTIFIER</b>	REVERSE VOLTAGE - <b>50 to 1000</b> Volts FORWARD CURRENT - <b>25</b> Amperes
<b>FEATURES</b> <ul style="list-style-type: none"> <li>● Utilizing viod-free molded plastic technique</li> <li>● Low power loss</li> <li>● High Surge Capability</li> <li>● High temperature soldering guaranteed: 265°C/10S</li> </ul>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><b>ARS</b></p> </div> <div style="text-align: center;"> <p><b>AR</b></p> </div> </div> <div style="text-align: center; margin-top: 20px;"> </div>
<b>MECHANICAL DATA</b> <ul style="list-style-type: none"> <li>● Terminal: Plated axial terminals solderable per MIL STD-202E, Method 208C</li> <li>● Case: Molded with UL-94 Class V-O recognized flame retardant epoxy</li> <li>● Polarity: Color ring denotes cathode</li> </ul>	Dimensions in inches and (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	ARS25A	ARS25B	ARS25D	ARS25G	ARS25J	ARS25K	ARS25M	UNIT
		AR25A	AR25B	AR25D	AR25G	AR25J	AR25K	AR25M	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =55 °C	I(AV)	25							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I <sub>FSM</sub>	400							A
Maximum Instantaneous Forward Voltage (at Rated Forward Current)	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @T <sub>A</sub> =25°C at Rated DC Bolcking Voltage @T <sub>A</sub> =150°C	I <sub>R</sub>	10 1000							uA
Typical Junction Capacitance Element (Note1)	C <sub>J</sub>	300							pF
Typical Thermal Resistance (Note2)	R <sub>θJA</sub>	1.0							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C
Polarity and Voltage Denotation Color Ring		Red	Yellow	Silver	Orange	Green	Blue	Violet	

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

2.Thermal resistance from junction of ambient.

FIG. 1 – FORWARD CURRENT DERATING CURVE

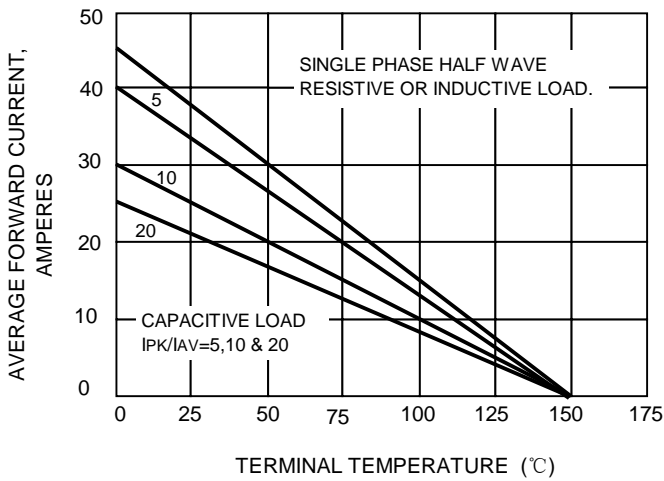


FIG.2-MAXIMUM NON-REPETITIVE  
PEAK FORWARD SURGE CURRENT

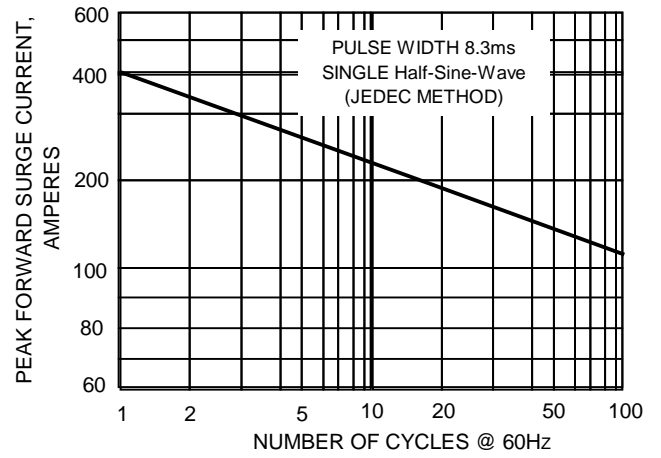


FIG.3-TYPICAL INSTANTANEOUS  
FORWARD CHARACTERISTICS

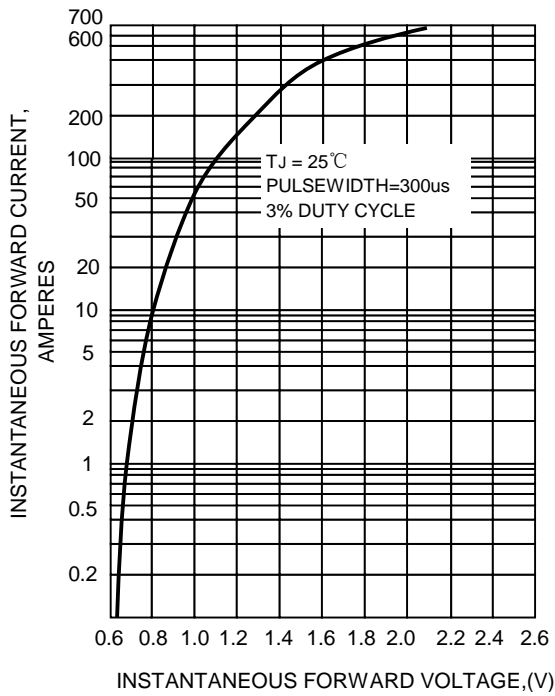


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

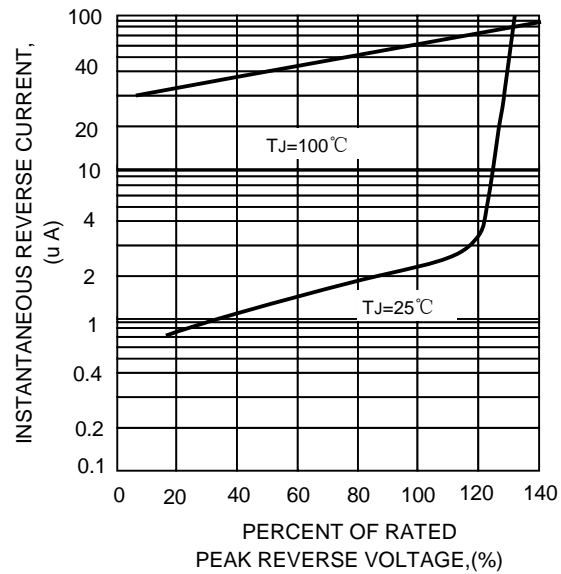


FIG.5-TYPICAL JUNCTION CAPACITANCE

