



ARS25A-ARS25M, AR25A-AR25M

| HIGH CURRENT AUTOMOBILE RECTIFIER | REVERSE VOLTAGE - 50 to 1000Volts FORWARD CURRENT - 25 Amperes |
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| <p>FEATURES</p> <ul style="list-style-type: none"> ● Utilizing viod-free molded plastic technique ● Low power loss ● High Surge Capability ● High temperature soldering guaranteed: 265°C/10S <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Terminal: Plated axial terminals solderable per MIL STD-202E, Method 208C ● Case: Molded with UL-94 Class V-O recognized flame retardant epoxy ● Polarity: Color ring denotes cathode | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>ARS</p> </div> <div style="text-align: center;"> <p>AR</p> </div> </div> <div style="text-align: center; margin-top: 20px;"> </div> <p style="text-align: center;">Dimensions in inches and (millimeters)</p> |

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 _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @T _A =55 °C | I(AV) | 25 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load | I _{FSM} | 400 | | | | | | | A |
| Maximum Instantaneous Forward Voltage (at Rated Forward Current) | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @T _A =25°C at Rated DC Bolcking Voltage @T _A =150°C | I _R | 10 1000 | | | | | | | uA |
| Typical Junction Capacitance Element (Note1) | C _J | 300 | | | | | | | pF |
| Typical Thermal Resistance (Note2) | R _{θJA} | 1.0 | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -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.

RATING AND CHARACTERISTIC CURVES

ARS25, AR25 SERIES



FIG. 1 – FORWARD CURRENT DERATING CURVE

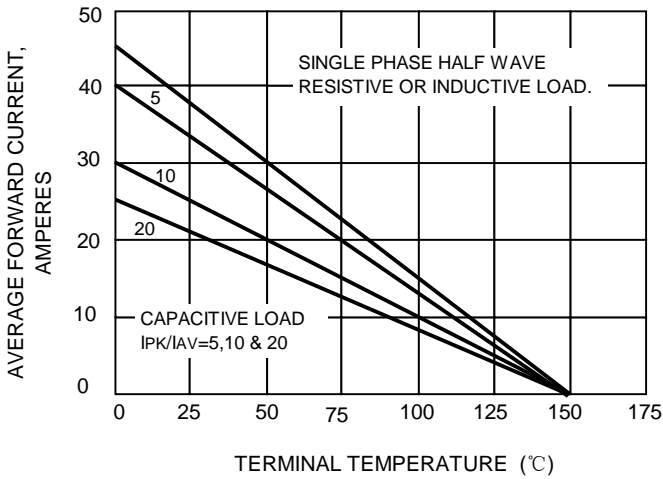


FIG.2-MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT

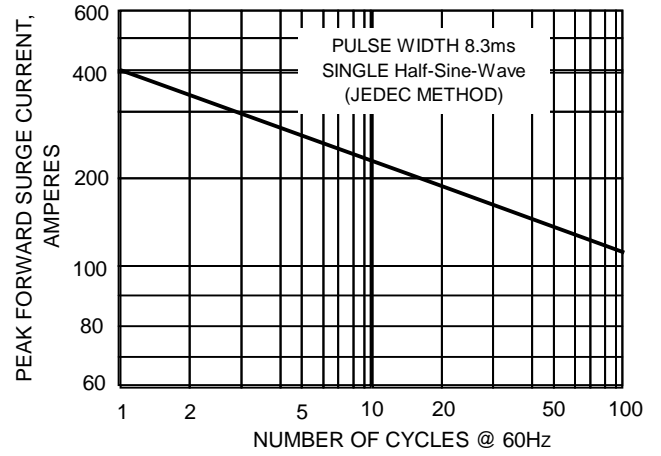


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

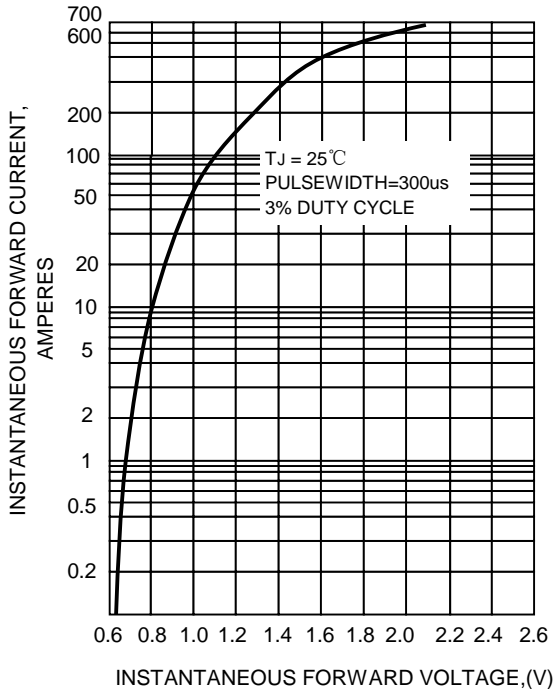


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

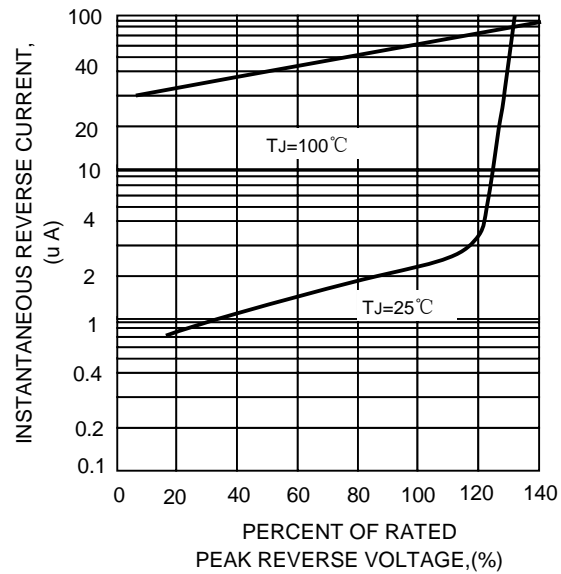


FIG.5-TYPICAL JUNCTION CAPACITANCE

