

HIGH CURRENT AUTOMOBILE RECTIFIER	REVERSE VOLTAGE - 50 to 1000Volts FORWARD CURRENT - 25 Amperes
FEATURES ●Utilizing viod-free molded plastic technique ●Low power loss ●High Surge Capability ●High temperature soldering guaranteed: 265°C/10S MECHANICAL DATA ●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	AR 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	AR2505	AR251	AR252	AR254	AR256	AR258	AR2510	UNIT
Maximum Recurrent 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)	25							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	IFSM	400							A
Maximum Instantaneous Forward Voltage (at Rated Forward Current)	VF	1.1							V
Maximum DC Reverse Current @TA=25°C at Rated DC Bolcking Voltage @TA=150°C	IR	10 1000							uA
Typical Junction Capacitance Element (Note1)	CJ	300							pF
Typical Thermal Resistance (Note2)	RθJA	1.0							°C/W
Operating Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TSTG	-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

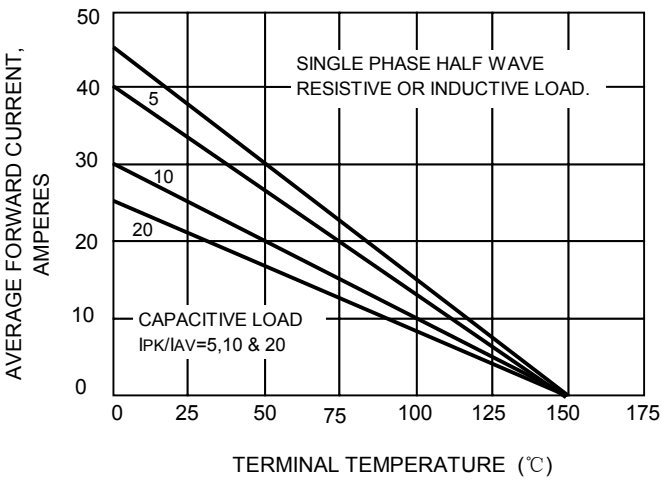


FIG.2-MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT

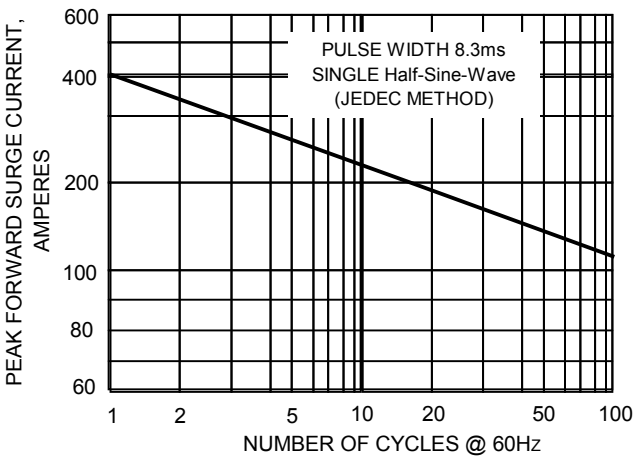


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

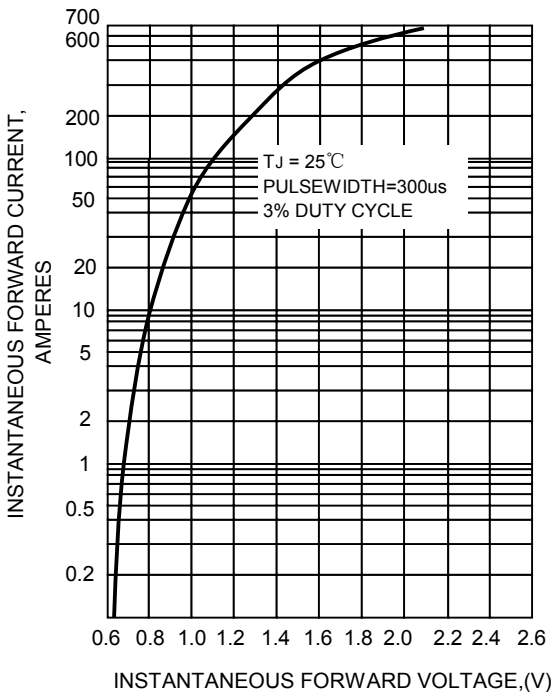


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

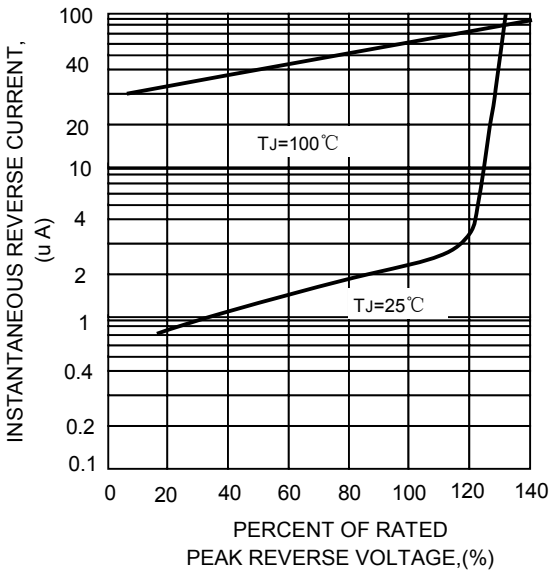


FIG.5-TYPICAL JUNCTION CAPACITANCE

