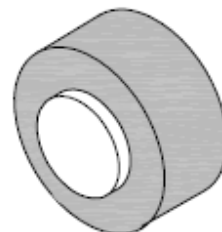


25A Automotive Rectifiers

Features

- Low leakage
- Low forward voltage drop
- High current capability
- High forward surge current capacity
- RoHS Compliance



AR



Mechanical Data

Case:	AR, molded plastic body
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Plated slug, solderable per MIL-STD-202, Method 208C
Polarity:	Color ring denotes cathode end
Weight:	0.064 ounces, 1.82 grams

Maximum Ratings and Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	AR 2505	AR 251	AR 252	AR 254	AR 256	AR 258	Unit	Conditions
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	V	
V _{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	V	
V _{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	V	
I _{F(AV)}	Maximum Average Forward Rectified Current	25						A	Tc=110° C
I _{FSM}	Peak Forward Surge Current	400						A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
V _F	Forward Voltage	1.05						V	IF=25A
I _R	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0						μA	TA=25° C
		250							TA=100° C

25A Automotive Rectifiers

AR2505 - AR258

Symbol	Description	AR 2505	AR 251	AR 252	AR 254	AR 256	AR 258	Unit	Conditions
R_{thJC}	Typical Thermal Resistance	1.0						$^{\circ}\text{C} / \text{W}$	
T_J , T_{STG}	Operating Junction and Storage Temperature Range	-65 to +175						$^{\circ}\text{C}$	
	Polarity and Voltage Demotion Color Band	Red	Yellow	Silver	Orange	Green	Blue		

Note: (1) Enough heatsink must be considered in application.
 (2) Single phase, half wave, 60Hz, resistive or inductive load.
 (3) For capacitive load derate current by 20%.

Typical Characteristics Curves

Fig.1-Typical Forward Current Derating Curve

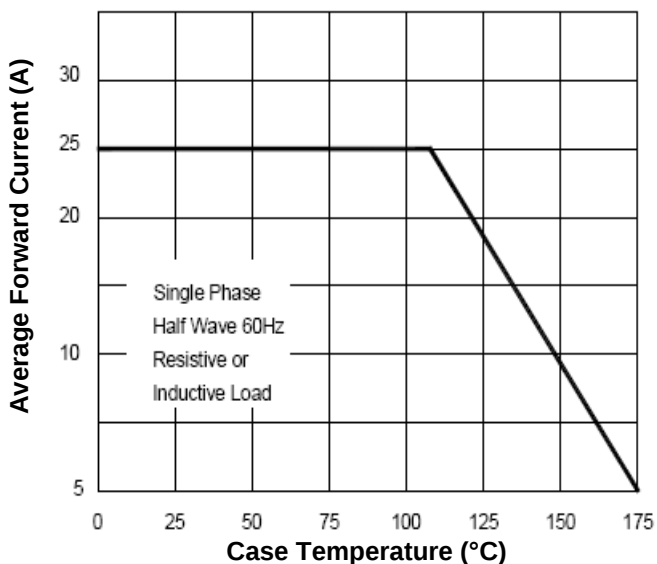
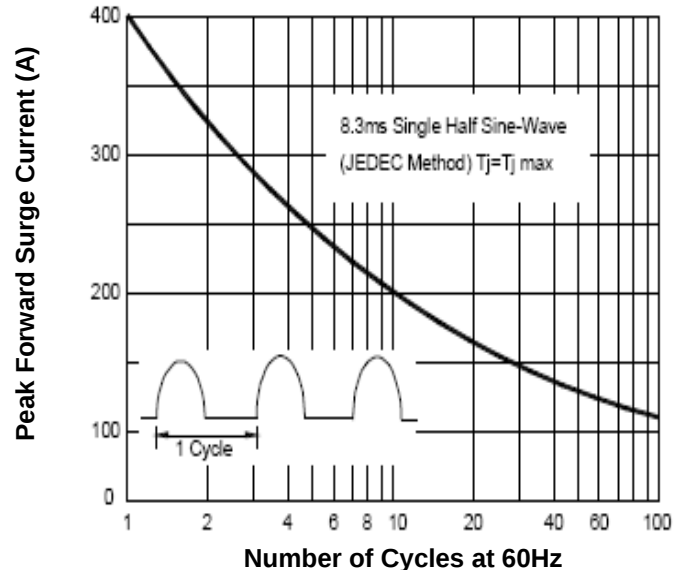


Fig.2-Max. Non-Repetitive Peak Forward Surge Current



25A Automotive Rectifiers

AR2505 - AR258

Fig.3- Typical Instantaneous Forward Characteristics

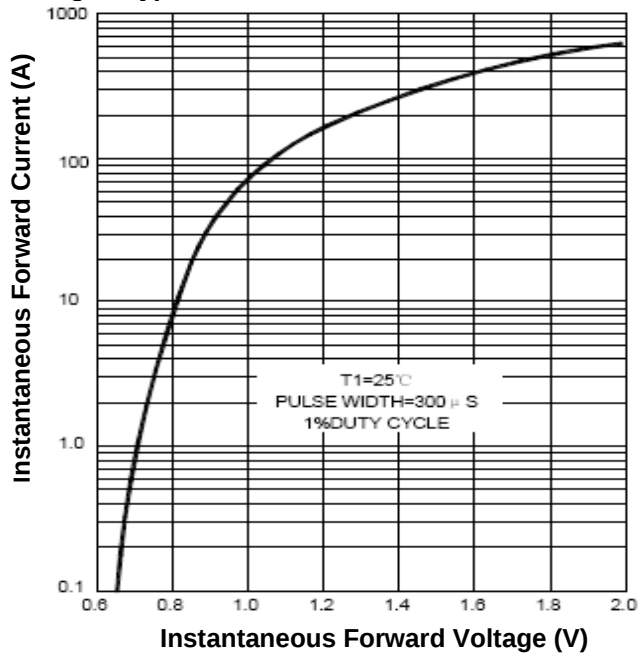
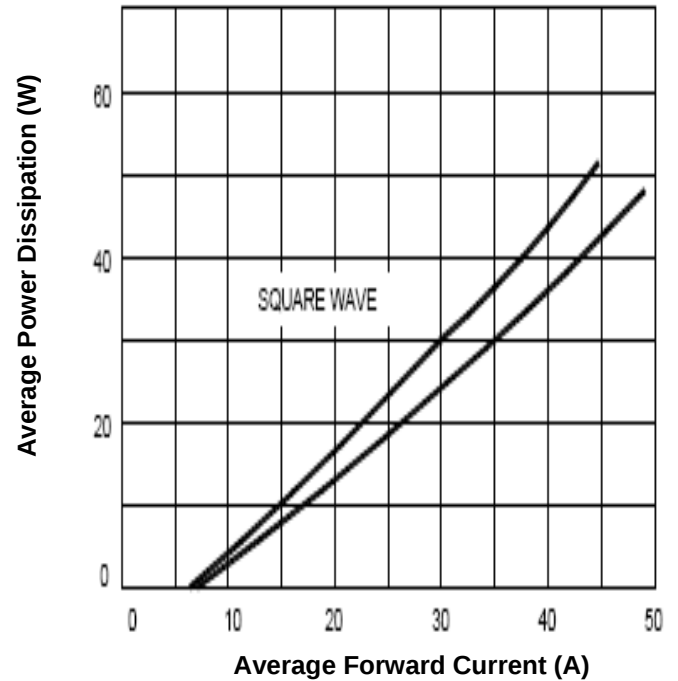
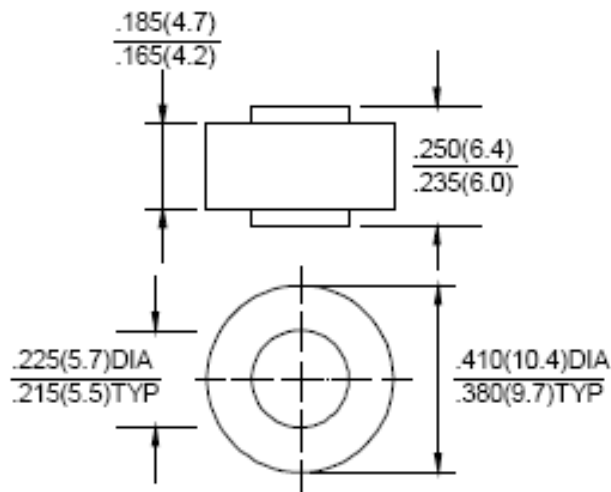


Fig.4-Forward Power Dissipation



Dimensions in inch (mm)



AR

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