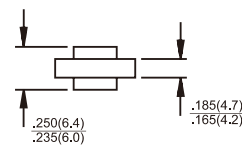
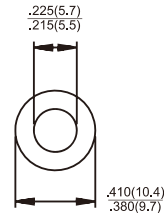




# AR25 SERIES

## 25.0 AMPS. High Current Button Rectifiers

### AR



### Features

- ✧ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ✧ Low cost construction utilizing void-free molded plastic technique
- ✧ Low cost
- ✧ Diffused junction
- ✧ Low leakage
- ✧ High surge capability
- ✧ High temperature soldering guaranteed: 260°C for 10 seconds
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

### Mechanical Data

- ✧ Case: Molded plastic case
- ✧ Terminals: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208
- ✧ Polarity: Color ring denotes cathode
- ✧ Weight: 1.8 grams
- ✧ Mounting position: Any

Dimensions in inches and (millimeters)

Marking Diagram



- AR25X = Specific Device Code
- G = Green Compound
- Y = Year
- M = Work Month

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number	Symbol	AR 25A	AR 25B	AR 25D	AR 25G	AR 25J	AR 25K	AR 25M	Units
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 @Tc = 150 °C	IF(AV)	25							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method ) at Tj=150°C	IFSM	400							A
Maximum Instantaneous Forward Voltage @ 25A	VF	1.0							V
Maximum DC Reverse Current at @ TA=25°C Rated DC Blocking Voltage (Note 1) @ TA=125°C	IR	5.0 250							uA uA
Typical Reverse Recovery Time (Note 2)	Trr	3.0							uS
Typical Junction Capacitance ( Note 4 ) Tj=25°C	Cj	300							pF
Typical Thermal Resistance ( Note 3 )	RθJC	1.0							°C/W
Operating and Storage Temperature Range	Tj, TSTG	-50 to +175							°C

- Notes:
1. Pulse Test with PW=300 usec, 1% Duty Cycle
  2. Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A
  3. Thermal Resistance from Junction to Case, Single Side Cooled.
  4. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

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## RATINGS AND CHARACTERISTIC CURVES (AR25 SERIES)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

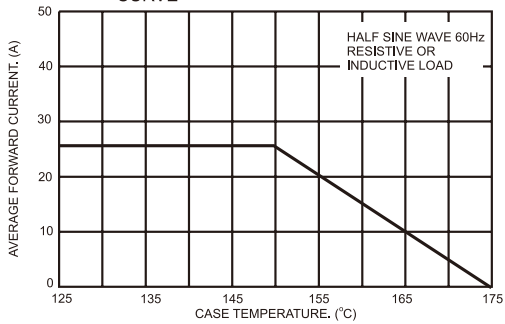


FIG.2- TYPICAL REVERSE CHARACTERISTICS

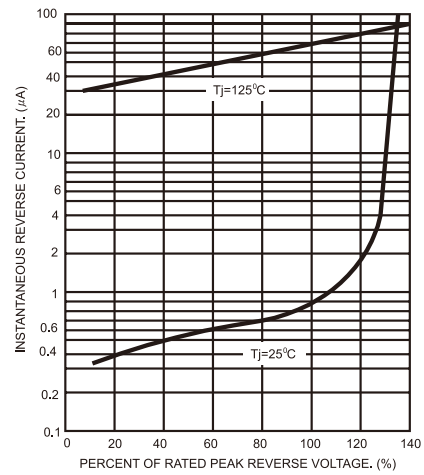


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

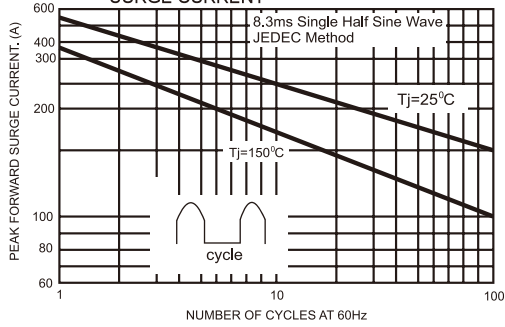


FIG.5- TYPICAL FORWARD CHARACTERISTICS

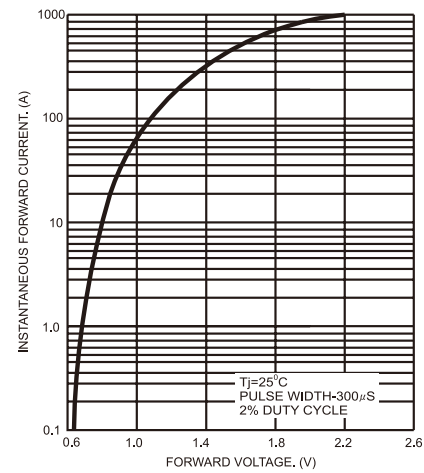


FIG.4- TYPICAL JUNCTION CAPACITANCE

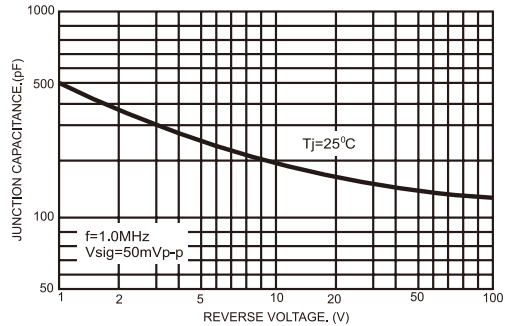
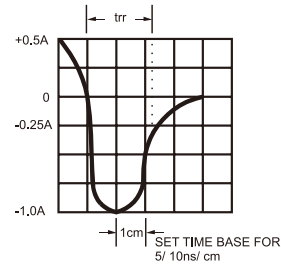
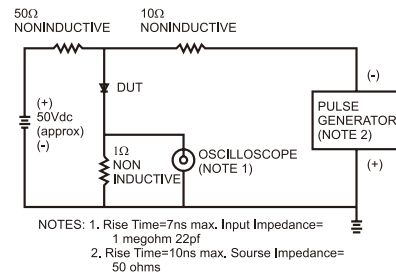


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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