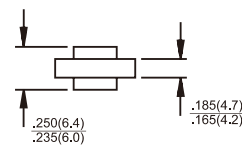
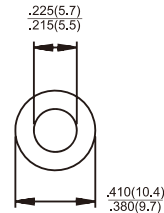




AR25 SERIES

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.

RATINGS AND CHARACTERISTIC CURVES (AR25 SERIES)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

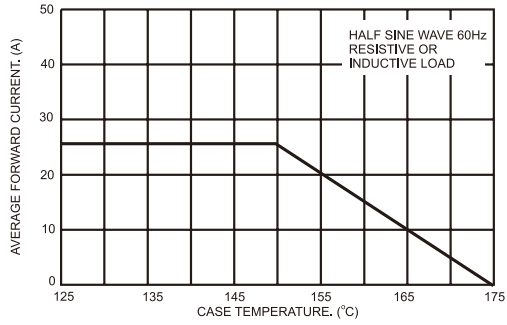


FIG.2- TYPICAL REVERSE CHARACTERISTICS

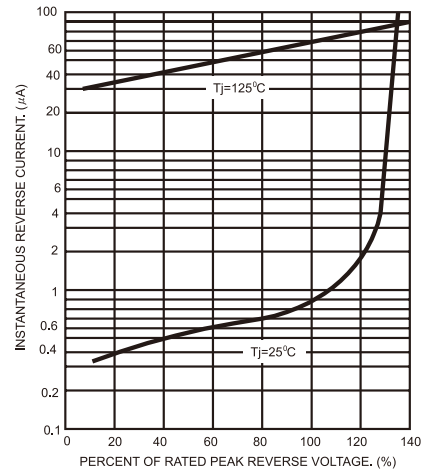


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

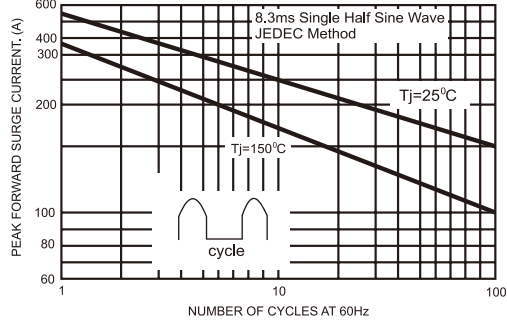


FIG.5- TYPICAL FORWARD CHARACTERISTICS

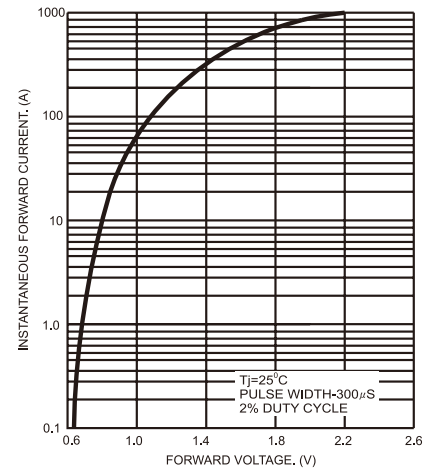


FIG.4- TYPICAL JUNCTION CAPACITANCE

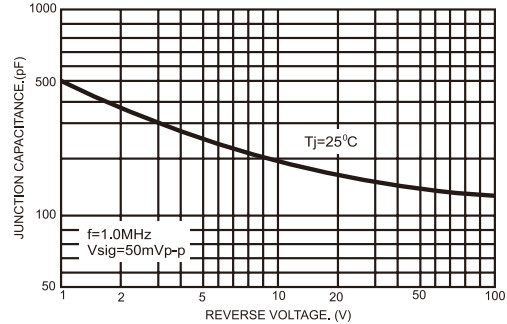


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

