

R1A THRU R1M

1.0AMP SURFACE MOUNT GLASS FAST RECOVERY RECTIFIER

Features

- Fast switching for high efficiency
- Low Power Loss, High Efficiency
- · High current capability
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classication Rating 94V-0

Mechanical Data

- · Case: Molded plastic SMAF
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- · Polarity:Cathode Band or Cathode Notch
- Mounting Position: Any
- Making: Type Number

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

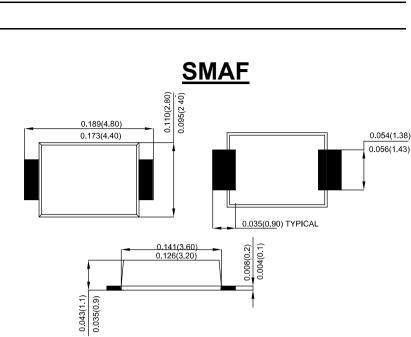
For capacitive load derate current by 20%

| Type Number | SYMBOL | R1A | R1B | R1D | R1G | R1J | R1K | R1M | 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 |
| Average Rectified Output Current @⊺ =90℃ | lf(AV) | 1.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 30 | | | | | | | A |
| I ² t Rating for Fusing (t < 8.3ms) | l²t | 3.735 | | | | | | | A ² S |
| Forward Voltage @IF=1.0A | V_{FM} | 1.3 | | | | | | | V |
| Peak Reverse Current @T _A =25 °C | 5.0 | | | | | | | | |
| At Rated DC Blocking Voltage@T _A =125 °C | ۱ _R | 150 | | | | | | | uA |
| Maximum Reverse Recovery Time (Note1) | Trr | | 150 | | | 250 | 50 | 00 | ns |
| Typical Junction Capacitance (Note 2) | CJ | 12 | | | | | | | рF |
| Typical Thermal Resistance Junction to Ambient(Note 3) | R⊕∧ R⊕∟ | 100 32 | | | | | | | °C/W |
| Operating Temperature Range | TJ | -55 to+150 | | | | | | | °C |
| Storage Temperature Range | Tstg | -55 to +150 | | | | | | | °C |

Note: 1.Reverse Recovery Test Conditions:IF=0.5A,IR=1.0A,IRR=0.25A.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

3. 8.0mm² (.013mm thick) land areas.



Dimiensions in inches and (milimeters)







FIG.3MAXIMUM NON-REPEITIVE SURGE CURRENT

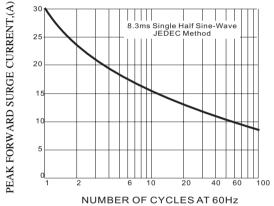
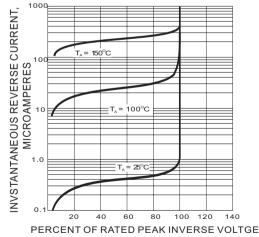
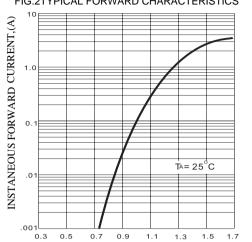


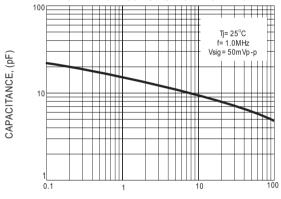
FIG.5TYPICAL REVERSE CHRACTERISTICS





INSTANEOUS FORWARD VOLTAGE,(V)





REVERSE VOLTAGE, (V)

Fig.6 TYPICAL CAPACITANCE

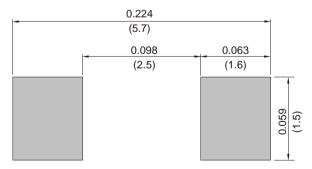


FIG.2TYPICAL FORWARD CHARACTERISTICS



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