

Small Signal Product

Silicon Bridge Rectifiers

FEATURES

- Ultra low leakage current $I_R < 2\mu A$, $T_A = 125^\circ C$
- No solder used, real fully in line with lead free
- Package thickness is 1.2 mm
- High ESD > 12 kV (HBM model)
- Plastic material has U/L flammability classification 94V-0
- High temperature soldering guaranteed: 260°C/10s (Reflow)
- High temperature soldering guaranteed:
350°C/ 3s (Manual welding)

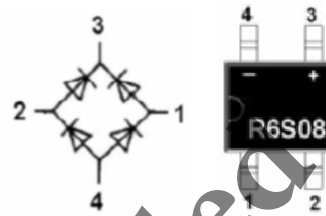


TMB



MECHANICAL DATA

- Case: TMB
- Marking Code : R6S08
- Weight: 58mg (approximately)



| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted) | | | |
|--|-----------------------------------|--------------|------|
| PARAMETER | SYMBOL | VALUE | UNIT |
| Repetitive Peak Reverse Voltage | V _{RRM} | 600 | V |
| RMS Voltage | V _{RMS} | 420 | V |
| DC Blocking Voltage | V _{DC} | 600 | V |
| Average Forward Rectified Current | I _{F(AV)} | 0.8 | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave | I _{FSM} | 14 | A |
| Thermal Resistance | R _{θJA} | 200 | °C/W |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | -55 to + 150 | °C |

| PARAMETER | TEST CONDITIONS | SYMBOL | VALUE | Units |
|-----------------|--|----------------|-------|-------|
| Reverse Current | V _{RM} = V _{RRM} , T _A = 25 °C | I _R | 0.5 | μA |
| | V _{RM} = V _{RRM} , T _A = 125 °C | | 2.0 | |
| Forward Voltage | I _F = 0.4 A, T _A = 25 °C | V _F | 1.0 | V |

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RATINGS AND CHARACTERISTICS CURVES

($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 Reverse Voltage Characteristics

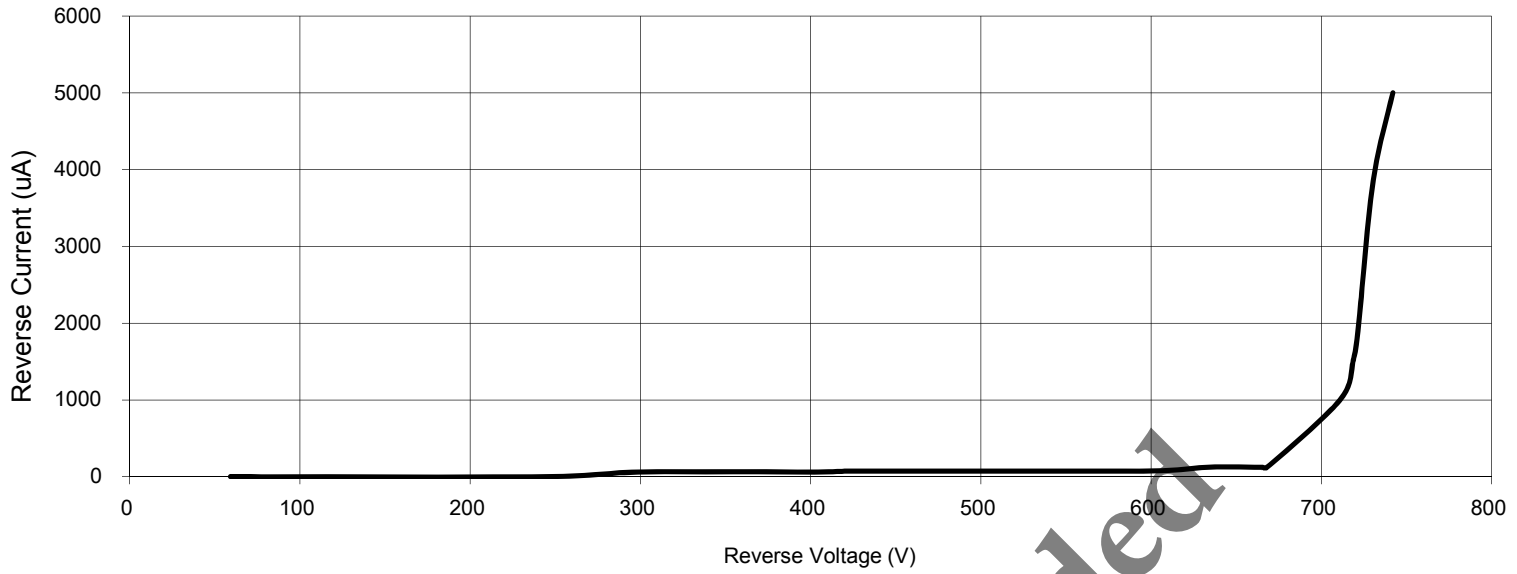


Fig. 2 Forward Derating Curve

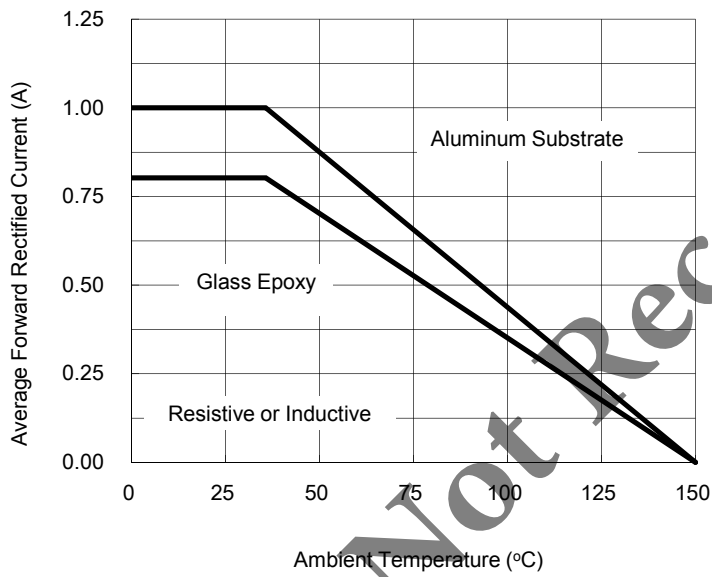


Fig. 3 Typical Reverse Characteristics

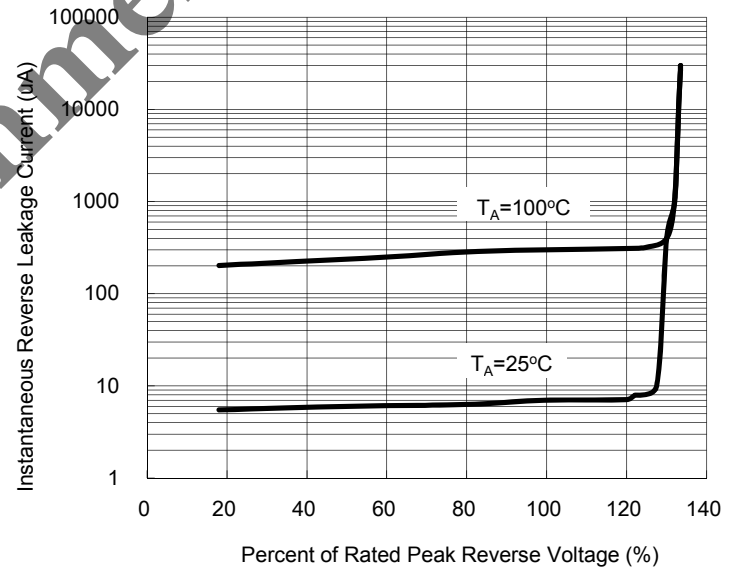
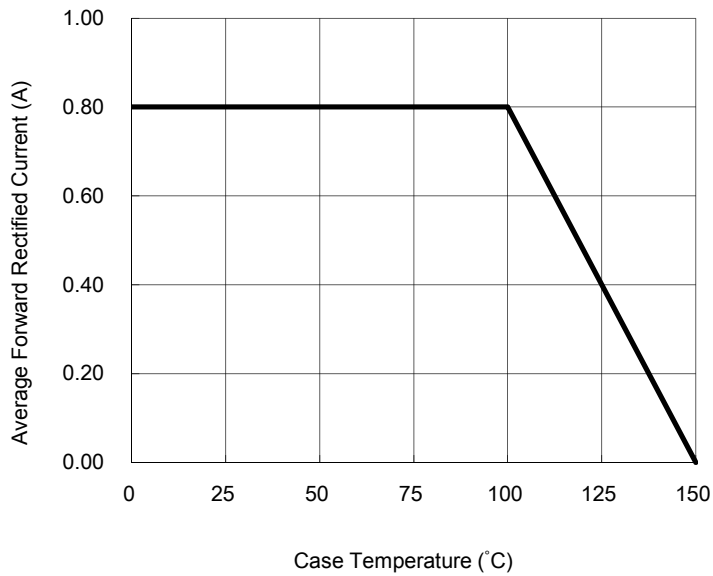


Fig. 4 Forward Derating Curve



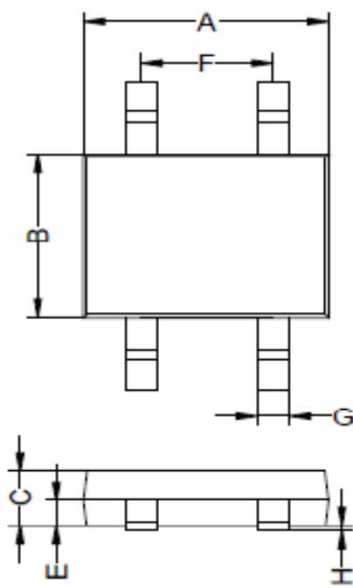
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| ORDERING INFORMATION | | | | |
|----------------------|--------------|---------------------|---------|---------------|
| PART NO. | PACKING CODE | PACKING CODE SUFFIX | PACKAGE | PACKING |
| TMBR6S08 | R7 | G | TMB | 5K / 13" Reel |

| EXAMPLE | | | | |
|--------------------|----------|--------------|---------------------|----------------|
| PREFERRED PART NO. | PART NO. | PACKING CODE | PACKING CODE SUFFIX | DESCRIPTION |
| TMBR6S08 R7G | TMBR6S08 | R7 | G | Green compound |

PACKAGE OUTLINE DIMENSIONS

TMB



| DIM. | Unit (mm) | | Unit (inch) | |
|------|-----------|------|-------------|-------|
| | Min | Max | Min | Max |
| A | 4.50 | 4.70 | 0.177 | 0.185 |
| B | 3.60 | 3.80 | 0.142 | 0.150 |
| C | 1.10 | 1.30 | 0.043 | 0.051 |
| E | 0.45 | 0.65 | 0.018 | 0.026 |
| F | 2.60 | 2.80 | 0.102 | 0.110 |
| G | 0.60 | 0.80 | 0.024 | 0.031 |
| H | 0.05 | 0.15 | 0.002 | 0.006 |
| J | 0.20 Typ. | | 0.008 Typ. | |
| K | 6.60 | 7.00 | 0.260 | 0.276 |
| L | 5.10 | 5.50 | 0.201 | 0.217 |
| M | 0.90 | 1.10 | 0.035 | 0.043 |

Not Recommended

Not Recommended

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