



GA15Y

SURFACE MOUNT RECTIFIER

Voltage

1600 V

Current

1.5 A

Features

- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- Plastic package has underwriters laboratory flammability classification 94V-0
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: SMA Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.0024 ounces, 0.068 grams

SMA



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

| PARAMETER | SYMBOL | LIMIT | UNITS |
|--|---------------------------------|---------|-------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 1600 | V |
| Maximum Rms Voltage | V _{RMS} | 1130 | V |
| Maximum Dc Blocking Voltage | V _{DC} | 1600 | V |
| Maximum Average Forward Current | I _{F(AV)} | 1.5 | A |
| Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load | I _{FSM} | 30 | A |
| Typical Junction Capacitance Measured at 1 MHZ And Applied V _R = 4 V | C _J | 8 | pF |
| Typical Thermal Resistance | R _{θJA} ⁽¹⁾ | 150 | °C/W |
| | R _{θJC} ⁽²⁾ | 20 | |
| Operating Junction Temperature Range | T _J | -55~150 | °C |
| Storage Temperature Range | T _{STG} | -55~150 | °C |



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

| PARAMETER | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNITS |
|-----------------|--------|--|------|------|------|-------|
| Forward Voltage | V_F | $I_F = 0.75\text{ A}, T_J = 25^\circ\text{C}$ | - | 0.93 | - | V |
| | | $I_F = 1.5\text{ A}, T_J = 25^\circ\text{C}$ | - | - | 1.15 | |
| | | $I_F = 0.75\text{ A}, T_J = 125^\circ\text{C}$ | - | 0.82 | - | |
| | | $I_F = 1.5\text{ A}, T_J = 125^\circ\text{C}$ | - | 0.91 | - | |
| Reverse Current | I_R | $V_R = V_{RRM}, T_J = 25^\circ\text{C}$ | - | - | 1 | uA |
| | | $V_R = V_{RRM}, T_J = 125^\circ\text{C}$ | - | 14.1 | - | |

NOTES:

1. Mounted on a FR4 PCB, single-sided copper, mini pad.
2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.



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TYPICAL CHARACTERISTIC CURVES

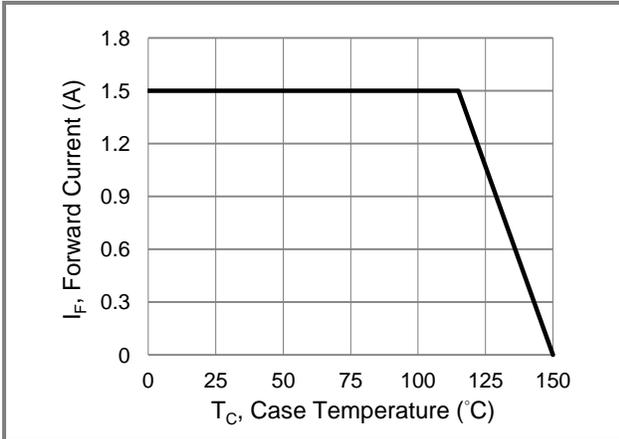


Fig.1 Forward Current Derating Curve

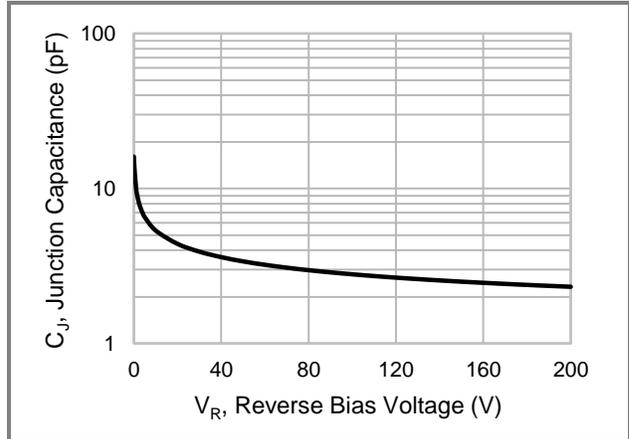


Fig.2 Typical Junction Capacitance

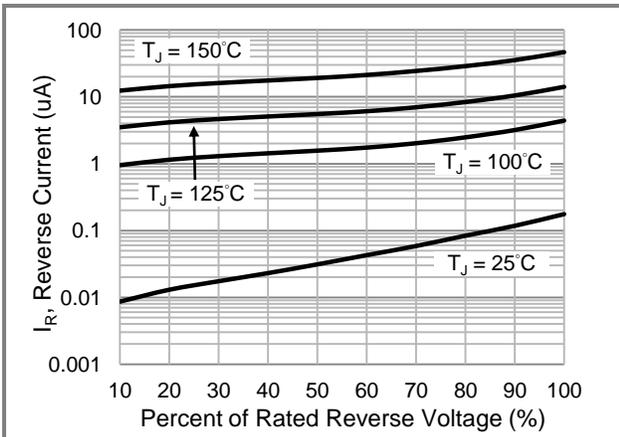


Fig.3 Typical Reverse Characteristics

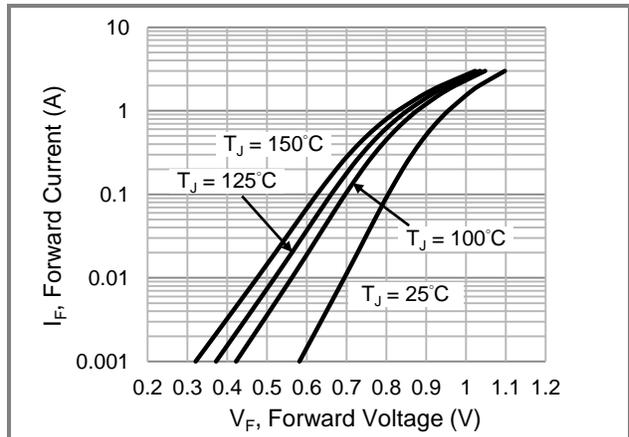


Fig.4 Typical Forward Characteristics

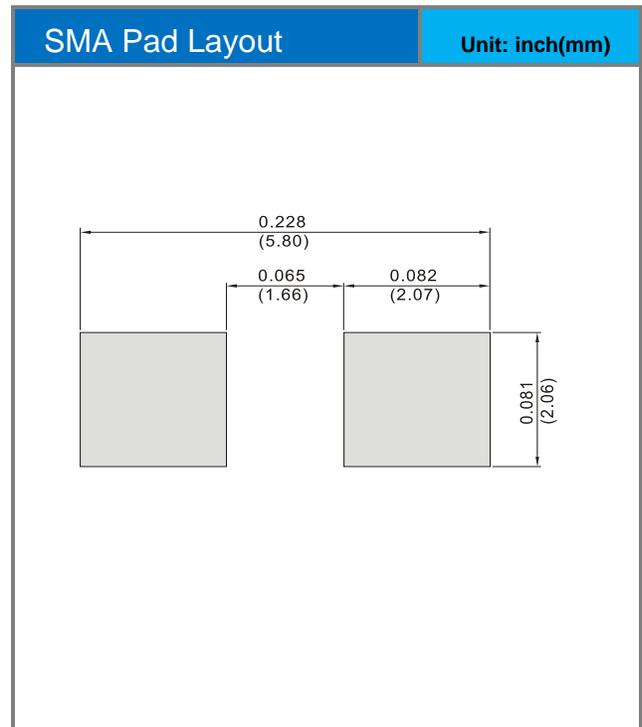
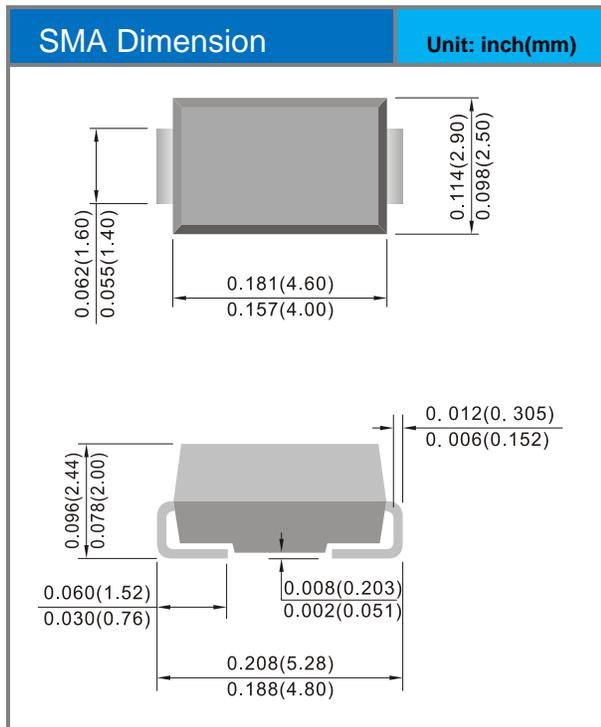


GA15Y

Part No Packing Code Version

| Part No Packing Code | Package Type | Packing Type | Marking | Version |
|----------------------|--------------|---------------------|---------|--------------|
| GA15Y_R2_00001 | SMA | 7.5K pcs / 13" reel | GA15Y | Halogen free |

Packaging Information & Mounting Pad Layout





GA15Y

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