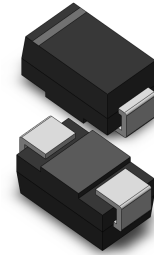


VOLTAGE RANGE: 1200V

CURRENT: 1 A

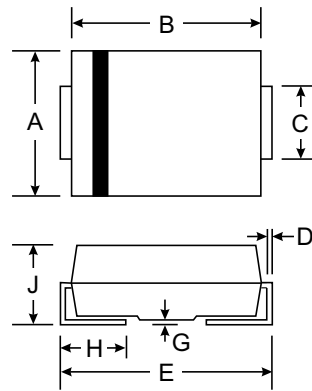
Features

- Cavity-free glass-passivated junction
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low switching losses, high efficiency
- Avalanche surge energy capability
- Meets environmental standard MIL-S-19500
- Meets MSL level 1, per J-STD-020, LF maximum peak of 250 °C
- Solder dip 260 °C, 40 s
- Component in accordance to RoHS 2002/95/EC



Mechanical Data

- Case: SMA(DO-214AC)Molded Plastic
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)
- Mounting Position: Any



| SMA(DO-214AC) | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 2.29 | 2.92 |
| B | 4.00 | 4.60 |
| C | 1.27 | 1.63 |
| D | 0.15 | 0.31 |
| E | 4.80 | 5.59 |
| G | 0.10 | 0.20 |
| H | 0.76 | 1.52 |
| J | 2.01 | 2.62 |
| All Dimensions in mm | | |



Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| PARAMETER | SYMBOL | BYG26G | UNIT |
|---|-----------------------------------|---------------|------|
| Device marking code | | 26G | |
| Maximum repetitive peak reverse voltage | V | 1200 | V |
| Maximum DC blocking | V | 1200 | V |
| Maximum average forward rectified current | I _{F(AV)} | 1.0 | A |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | I _{FSM} | 20 | A |
| Non-repetitive avalanche energy at T _A = 25 °C, I _{AS} = 1 A, L = 30 mH | E _{AS} | 15 | mJ |
| Operating junction and storage temperature range | T _J , T _{STG} | - 55 to + 150 | °C |



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

| PARAMETER | TEST CONDITIONS | | SYMBOL | EGF1T | UNIT |
|--|---|---|----------|-----------|---------------|
| Maximum instantaneous forward voltage ⁽¹⁾ | 1.0 A | $T_J = 25\text{ }^\circ\text{C}$ | V_F | 3.0 | V |
| Maximum DC reverse current ⁽²⁾ | V_{RM} | $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$ | I_R | 5.0 50 | μA |
| Typical reverse recovery time | $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$ | | t_{rr} | 75 | ns |
| Typical junction capacitance | 4.0 V, 1 MHz | | C_J | 8.0 | pF |

Notes:

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width $\leq 40\text{ ms}$

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

| PARAMETER | SYMBOL | EGF1T | UNIT |
|---|------------------------------------|----------|--------------------|
| Typical thermal resistance ⁽¹⁾ | $R_{\theta JA}$ $R_{\theta JL}$ | 50 20 | $^\circ\text{C/W}$ |

Note:

- (1) Thermal resistance from junction to ambient and from junction to lead, P.C.B. mounted on 0.95 x 0.95" (24 x 24 mm) copper pad areas

ORDERING INFORMATION (Example)

| PREFERRED P/N | UNIT WEIGHT (g) | PREFERRED PACKAGE CODE | BASE QUANTITY | DELIVERY MODE |
|-----------------------------|-----------------|------------------------|---------------|------------------------------------|
| EGF1T-E3/67A | 0.104 | 67A | 1500 | 7" diameter plastic tape and reel |
| EGF1T-E3/5CA | 0.104 | 5CA | 6500 | 13" diameter plastic tape and reel |
| EGF1THE3/67A ⁽¹⁾ | 0.104 | 67A | 1500 | 7" diameter plastic tape and reel |
| EGF1THE3/5CA ⁽¹⁾ | 0.104 | 5CA | 6500 | 13" diameter plastic tape and reel |

Note:

- (1) Automotive grade AEC Q101 qualified

RATINGS AND CHARACTERISTICS CURVES

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

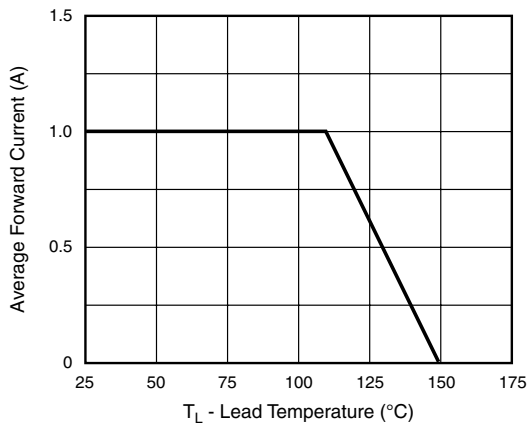


Figure 1. Maximum Forward Current Derating Curve

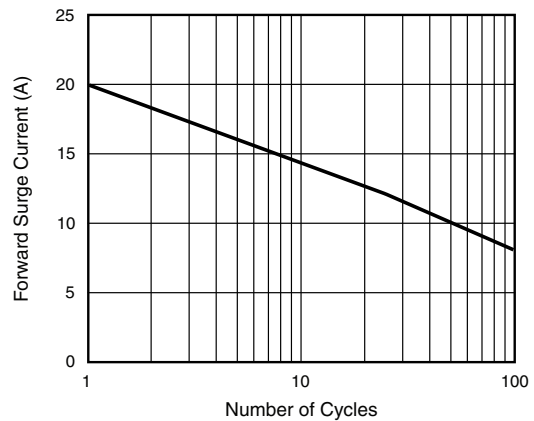


Figure 2. Maximum Non-Repetitive Forward Surge Current

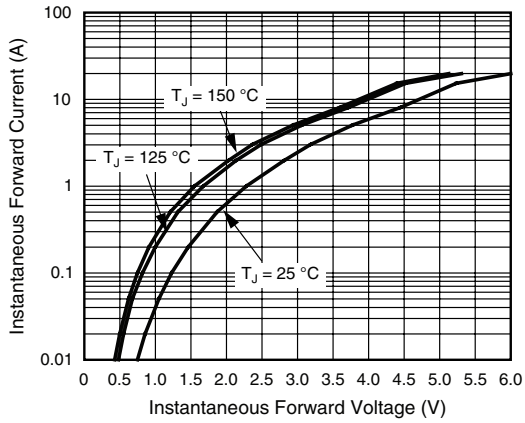


Figure 3. Typical Instantaneous Forward Characteristics

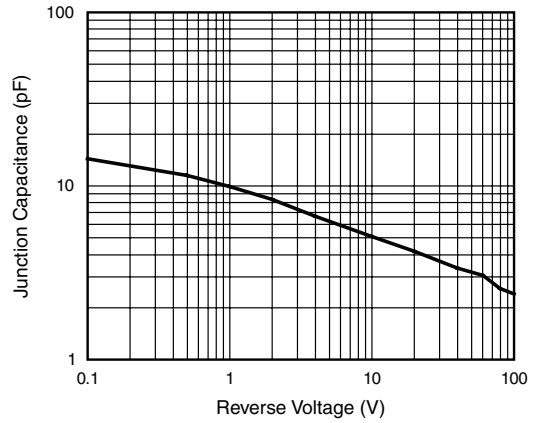


Figure 5. Typical Junction Capacitance Per Leg

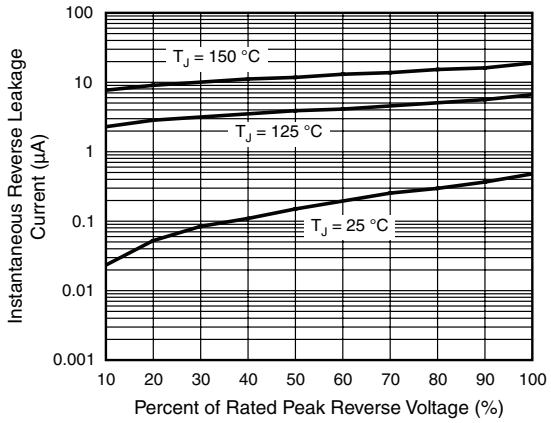


Figure 4. Typical Reverse Leakage Characteristics

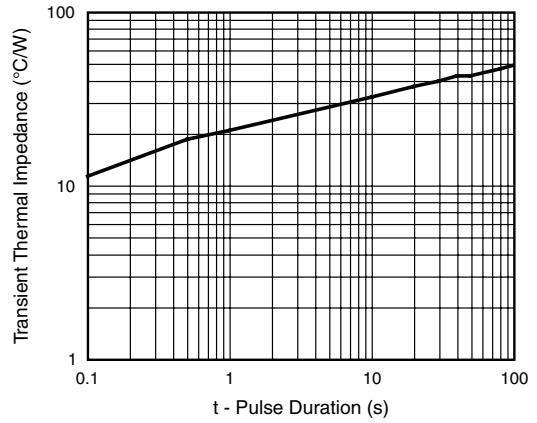


Figure 6. Typical Transient Thermal Impedance