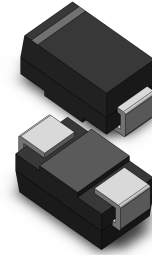


VOLTAGE RANGE: 200 - 600V
CURRENT: 1.5 A

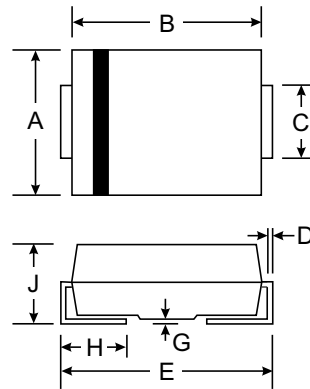
Features

- Glass passivated junction
- Low profile package
- Ideal for automated placement
- Low reverse current
- Soft recovery characteristics
- Ultrafast reverse recovery time



Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



| 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 $T_A = 25^\circ\text{C}$ unless otherwise specified

| RATING | SYMBOL | BYG20D | BYG20G | BYG20J | UNIT |
|--|-----------------|---------------|--------|--------|--------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 200 | 400 | 600 | V |
| Maximum Average Forward Current | $I_{F(AV)}$ | 1.5 | | | A |
| Peak Forward Surge Current 10 ms single half sine wave superimposed on rated load | I_{FSM} | 30 | | | A |
| Maximum Instantaneous Forward Voltage ⁽¹⁾ | V_F | 1.3 | | | V |
| at $I_F = 1\text{ A}$, $T_J = 25^\circ\text{C}$ | | 1.4 | | | |
| at $I_F = 1.5\text{ A}$, $T_J = 25^\circ\text{C}$ | | | | | |
| Maximum DC Reverse Current | I_R | 1.0 | | | μA |
| at $V_R = V_{RRM}$, $T_J = 25^\circ\text{C}$ | | 10 | | | |
| at $V_R = V_{RRM}$, $T_J = 100^\circ\text{C}$ | $I_{R(H)}$ | | | | |
| Maximum 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 Thermal Resistance, Junction to Lead | $R_{\theta JL}$ | 25 | | | $^\circ\text{C/W}$ |
| Typical Thermal Resistance, Junction to Ambient ⁽²⁾ | $R_{\theta JA}$ | 150 | | | $^\circ\text{C/W}$ |
| Pulse energy in avalanche mode, non repetitive (inductive load switch off) $I_{(BR)R} = 1\text{ A}$, $T_J = 25^\circ\text{C}$ | E_R | 20 | | | mJ |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | - 55 to + 150 | | | $^\circ\text{C}$ |

Notes :

- (1) Pulse test 300 μs pulse width, 1 % duty cycle
- (2) Mounted on epoxy-glass hard tissue



RATING AND CHARACTERISTIC CURVES (BYG20D - BYG20J)

FIG.1 - MAX. AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

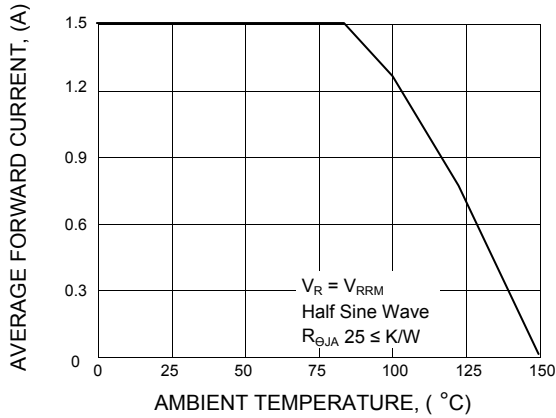


FIG.2 - DIODE CAPACITANCE VS. REVERSE VOLTAGE

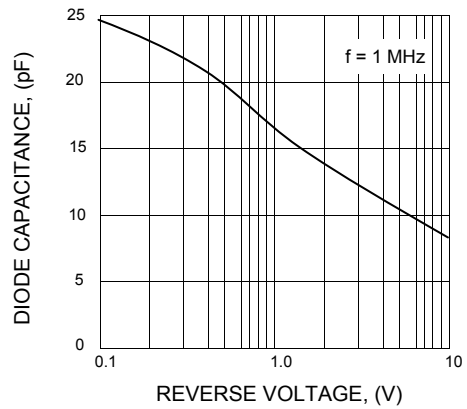


FIG.3 - FORWARD CURRENT VS. FORWARD VOLTAGE

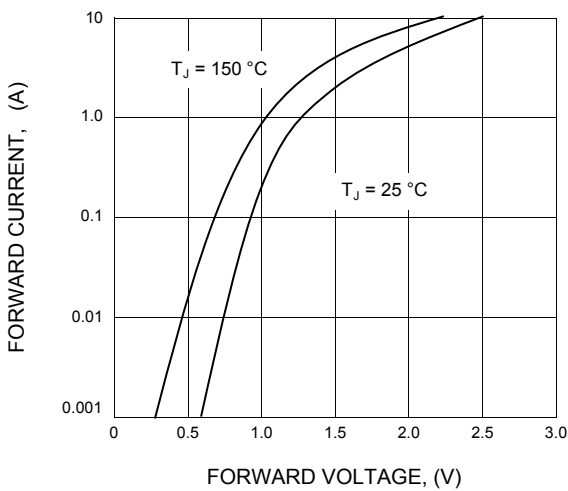


FIG.4 - REVERSE CURRENT VS. JUNCTION TEMPERATURE

