



EGP10A thru EGP10G

Glass Passivated Junction Fast Efficient Rectifiers
Reverse Voltage 50 to 400 Volts Forward Current 1.0 Ampere

Features

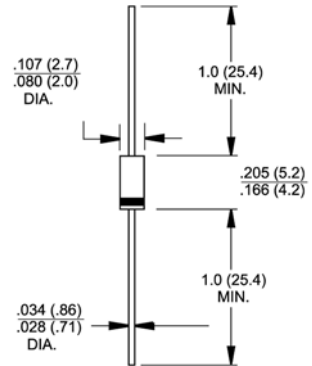
- ◆ Cavity-free glass-passivated junction
- ◆ Ultrafast reverse recovery time
- ◆ Low forward voltage drop
- ◆ Low leakage current
- ◆ Low switching losses, high efficiency
- ◆ High forward surge capability
- ◆ Solder Dip 260 °C, 40 seconds



DO-204AL (DO-41)

Mechanical Data

- ◆ Case: DO-204AL, molded epoxy over glass body Epoxy meets UL-94V-0 Flammability rating
- ◆ Terminals: Matte tin plated leads, solderable per J-STD-002B and JESD22-B102D
E3 suffix for commercial grade, HE3 suffix for high reliability grade (AEC Q101 qualified)
- ◆ Polarity: Color band denotes cathode end
- ◆ Weight: 0.012 ounce, 0.34 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter | Symbol | EGP 10A | EGP 10B | EGP 10C | EGP 10D | EGP 10F | EGP 10G | Unit |
|---|-----------------|-------------|---------|---------|---------|---------|---------|--------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 50 | 100 | 150 | 200 | 300 | 400 | Volts |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 105 | 140 | 210 | 280 | Volts |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 150 | 200 | 300 | 400 | Volts |
| Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$ | $I_{F(AV)}$ | 1.0 | | | | | | Amp |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 30.0 | | | | | | Amps |
| Maximum instantaneous forward voltage at 1.0A | V_F | 0.95 | | | | 1.25 | | Volts |
| Maximum DC reverse current at rated DC blocking voltage @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$ | I_R | 5.0 100 | | | | | | μA |
| Maximum reverse recovery time at $I_F = 0.5 \text{ A}$, $I_R = 1.0 \text{ A}$, $I_{tr} = 0.25 \text{ A}$ | t_{rr} | 50 | | | | | | nS |
| Typical junction capacitance at 4.0 V, 1 MHz | C_J | 22.0 | | | | 15.0 | | pF |
| Typical thermal resistance (Note 1) | $R_{\theta JA}$ | 50.0 | | | | | | $^\circ\text{C/W}$ |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to +150 | | | | | | $^\circ\text{C}$ |

- Notes:**
1. Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length
 2. Pulse test: 300us pulse width, 1% duty cycle

RATINGS AND CHARACTERISTIC CURVES

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

