



# EGP10A thru EGP10G

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

## Features

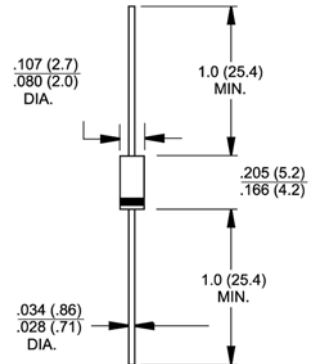
- ◆ Cavity-free glass-passivated junction
- ◆ Ultrafast reverse recovery time
- ◆ Low forward voltage drop
- ◆ Low leakage current
- ◆ Low switching losses, high efficiency
- ◆ High forward surge capability
- ◆ Solder Dip 260 °C, 40 seconds



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						$\mu\text{A}$
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)

