

Glass Passivated Junction Fast Efficient Rectifiers

PRODUCT SUMMARY

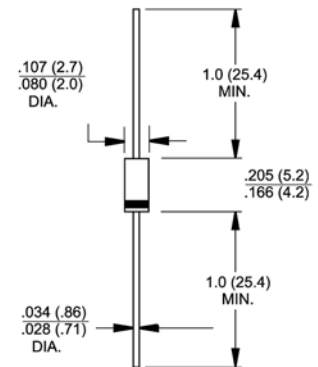
Reverse Voltage 50 to 400 Volts
Forward Current 1.0 Ampere



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)



Dimensions in inches and (millimeters)

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



Pb-free; RoHS-compliant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

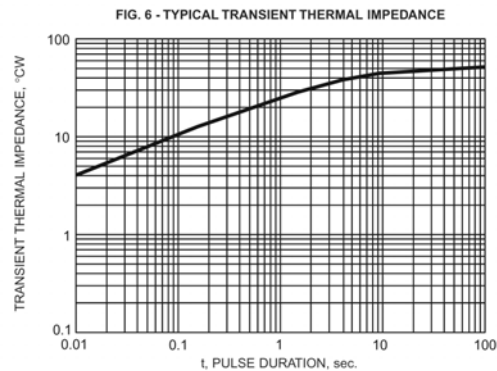
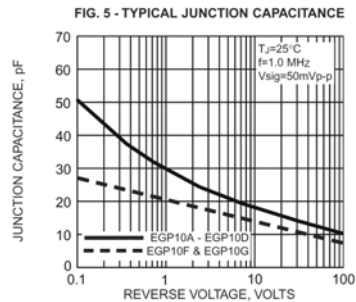
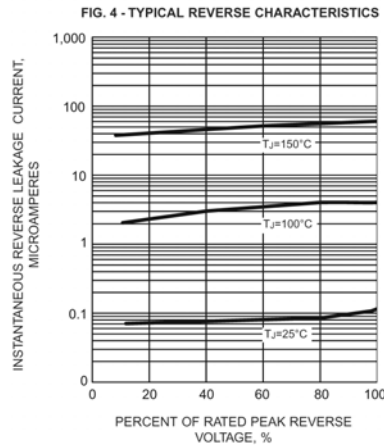
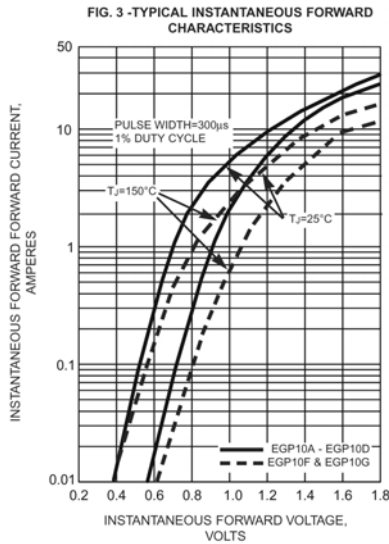
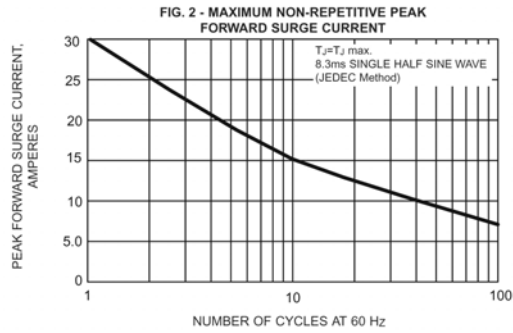
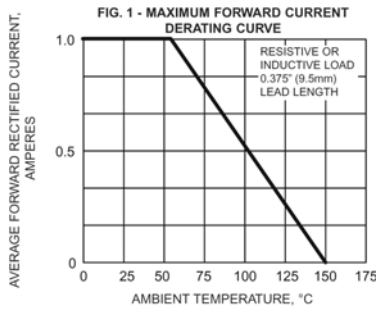
Rating at 25 °C ambient temperature unless otherwise specified.

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	I_R	@ $T_A=25^\circ\text{C}$ 5.0				@ $T_A=125^\circ\text{C}$ 100		μA
Maximum reverse recovery time at $I_F = 0.5 \text{ A}$, $I_R = 1.0 \text{ A}$, $I_{rr} = 0.25 \text{ A}$	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: 300 μs pulse width, 1% duty cycle

RATINGS AND CHARACTERISTIC CURVES

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



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