EGP30A THRU EGP30K

3.0 AMPS. Glass Passivated High Efficient Plastic Rectifiers

Voltage Range
50 to 800 Volts
Current
3.0 Amperes

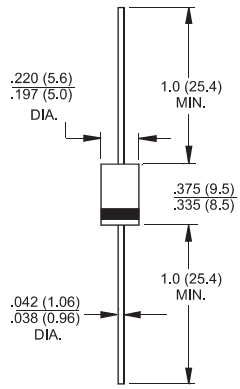
Features

- ✧ Plastic material used carries Underwriters Laboratories Classification 94V-O
- ✧ Glass passivated cavity-free junction
- ✧ Superfast recovery time for high efficiency
- ✧ Low forward voltage, high current capability
- ✧ Low leakage current
- ✧ High surge current capability
- ✧ High temperature metallurgically bonded construction
- ✧ High temperature soldering guaranteed: 300℃ / 10seconds, .375"(9.5mm) lead length at 5 lbs., (2.3kg) tension

Mechanical Data

- ✧ Case: JEDEC DO-201 molded plastic over solid glass body
- ✧ Lead: Plated axial leads, solderable per MIL-STD-750, Method 2026
- ✧ Polarity: Color band denotes cathode end
- ✧ Mounting position: Any
- ✧ Weight: 0.048 ounce, 1.28 gram

DO-201



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

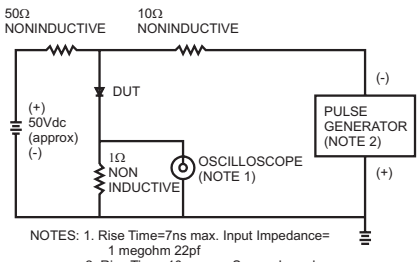
Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	Symbol	EGP 30A	EGP 30B	EGP 30D	EGP 30F	EGP 30G	EGP 30J	EGP 30K	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length @ T_A = 55℃	$I_{(AV)}$	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	125							A
Maximum Instantaneous Forward Voltage @ 3.0A	V_F	0.95			1.25		1.7		V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=125℃	I_R	5.0 100							uA uA
Maximum Reverse Recovery Time (Note 1) T_A=25°C	Trr	50					75		nS
Typical Junction Capacitance (Note 2)	Cj	60			50				pF
Typical Thermal Resistance (Note 3)	$R\theta_{JA}$	40							℃/W
Operating and Storage Temperature Range	T_J T_{STG}	-65 to + 150							℃

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.
3. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.

RATINGS AND CHARACTERISTIC CURVES (EGP30A THRU EGP30K)

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance=
1 megohm 22pf
2. Rise Time=10ns max. Sourse Impedance=
50 ohms

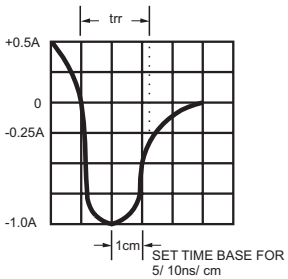


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

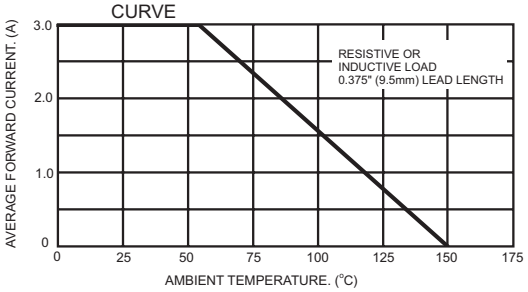


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

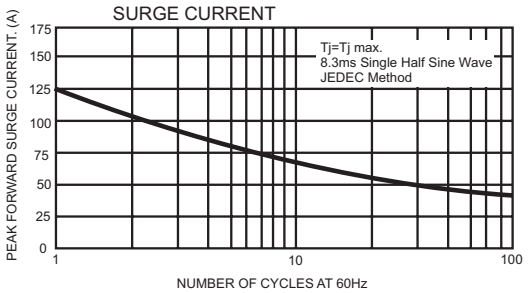


FIG.4- TYPICAL JUNCTION CAPACITANCE

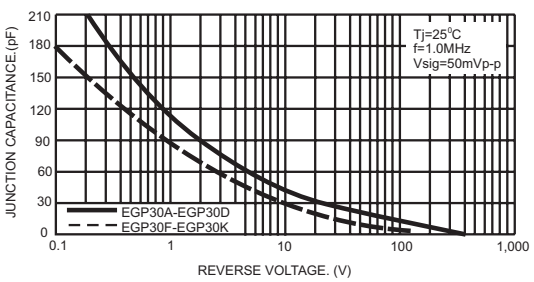


FIG.5- TYPICAL REVERSE CHARACTERISTICS

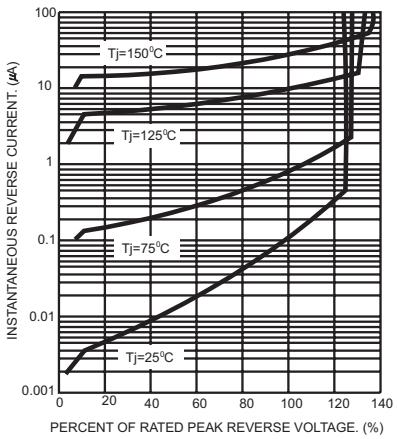
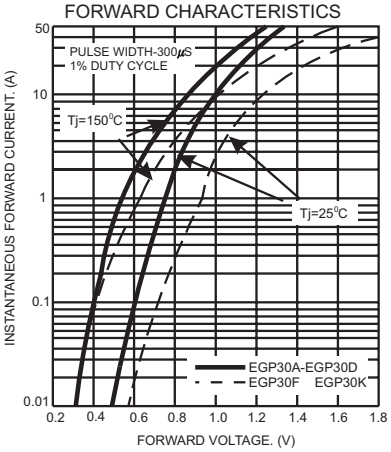


FIG.6- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.