



EGP20A THRU EGP20K

2.0 AMPS. Glass Passivated High Efficient Plastic Rectifiers



Voltage Range
50 to 800 Volts
Current
2.0 Amperes

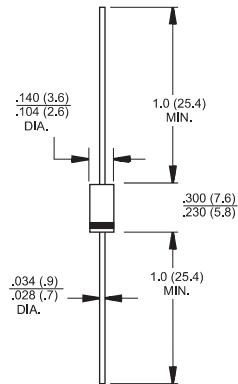
Features

- ✦ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ✦ 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°C/10 seconds, .375"(9.5mm) lead length at 5 lbs., (2.3kg) tension

Mechanical Data

- ✦ Cases: JEDEC DO-15 molded plastic over glass body
- ✦ Lead: Plated axial leads, solderable per MIL-STD-750, Method 2026
- ✦ Polarity: Color band denotes cathode end
- ✦ Mounting position: Any
- ✦ Weight: 0.015 ounce, 0.4 gram

DO-15



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C 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 20A	EGP 20B	EGP 20D	EGP 20F	EGP 20G	EGP 20J	EGP 20K	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 .375"(9.5mm) Lead Length @ $T_A = 55^\circ\text{C}$	$I_{(AV)}$	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	75.0							A
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	0.95		1.25		1.7		V	
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_R	5.0 100							uA uA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	50				75			nS
Typical Junction Capacitance (Note 2)	C_j	40			35				pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	60 20							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 150							°C

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 $V_R = 4.0$ Volts

3. Mount on Cu-Pad Size 10mm x 10mm on P.C.B.

RATINGS AND CHARACTERISTIC CURVES (EGP20A THRU EGP20K)

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

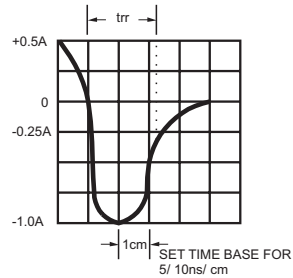
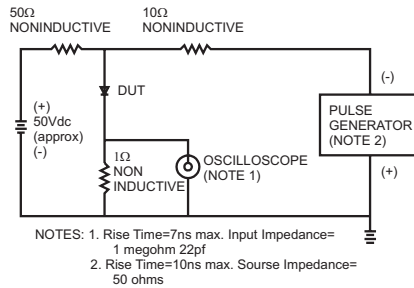


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

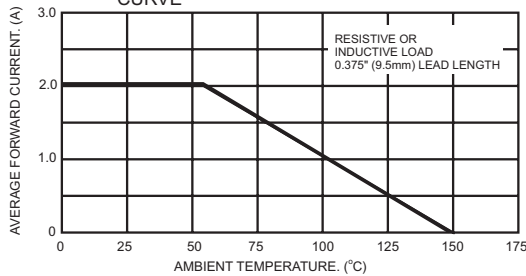


FIG.5- TYPICAL REVERSE CHARACTERISTICS

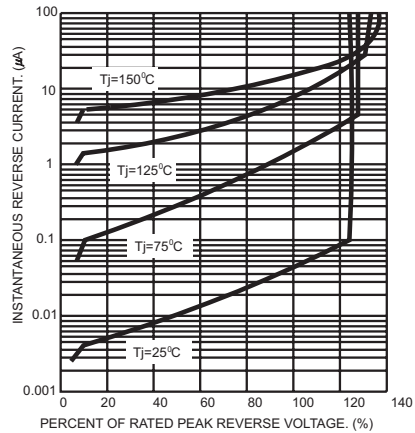


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

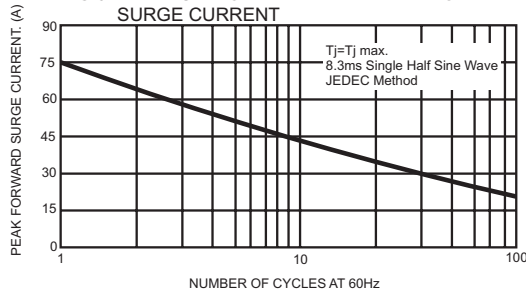


FIG.6- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

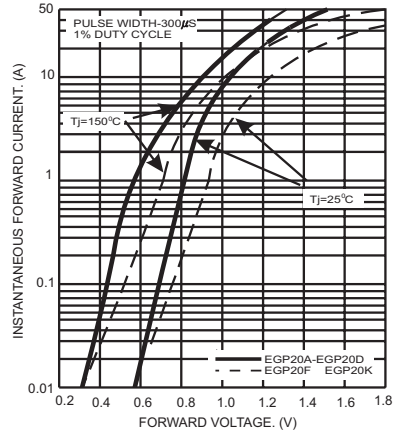
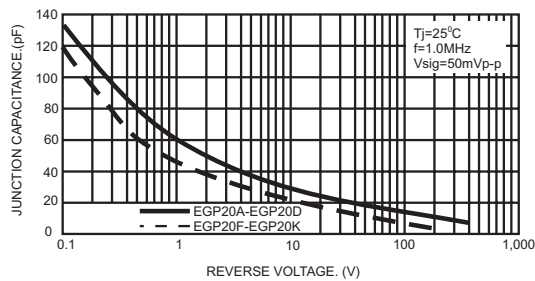


FIG.4- TYPICAL JUNCTION CAPACITANCE





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.