



SEMICONDUCTOR

GPRC

# EGF20A THRU EGF20M

**SUPER FAST RECTIFIER**  
Reverse Voltage: 50 to 1000 Volts  
Forward Current: 2.0 Amperes

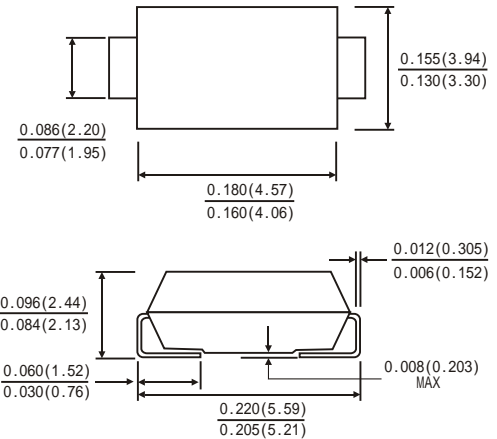
SILICON RECTIFIER

## FEATURES

- GPRC( Glass Passivated Rectifier Chip) inside
- Glass passivated cavity-free junction
- For Surface Mount Applications
- Easy to pick and place
- Low forward voltage drop, High current capability
- High surge current capability
- Super fast recovery time
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



## SMB(DO-214AA)



Dimensions in inches and (millimeters)

## MECHANICAL DATA

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: solder plated, solderable per MIL-STD-750, method 2026
- Polarity: color band denotes cathode end
- Weight: 0.003ounce, 0.093 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	EGF 20A	EGF 20B	EGF 20D	EGF 20F	EGF 20G	EGF 20J	EGF 20K	EGF 20M	Units	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	480	700	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	Volts	
Maximum Average Forward Rectified Current 0.375"(9.5mm)lead Length at T <sub>a</sub> =55 °C	I <sub>(AV)</sub>	2.0								Amp	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	65.0					60.0				Amps
Maximum Instantaneous Forward Voltage at 1.0 A	V <sub>F</sub>	0.95			1.25		1.7			Volts	
Maximum DC Reverse Current At Rated DC Blocking Voltage	T <sub>A</sub> =25 °C	5.0								μA	
	T <sub>A</sub> =100 °C	100									
Maximum Reverse Recovery Time(Note1)	T <sub>rr</sub>	50					75				ns
Typical Junction Capacitance(Note2)	C <sub>J</sub>	45									PF
Operating Junction and Storage Temperature Range	T <sub>J</sub>	-65 to +125									°C
	T <sub>STG</sub>	-65 to +150									

Note: 1. Test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A.

2. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

# RATINGS AND CHARACTERISTIC CURVES EGF20A THRU EGF20M

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

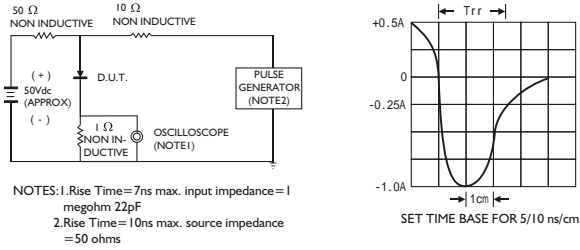


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

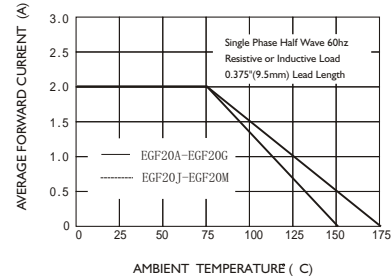


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

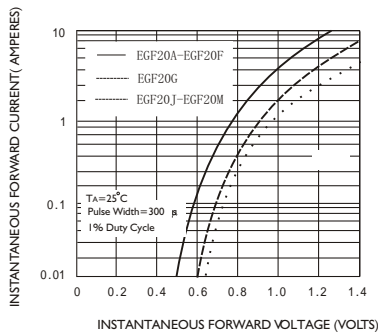


FIG.4-TYPICAL REVERSE CHARACTERISTICS

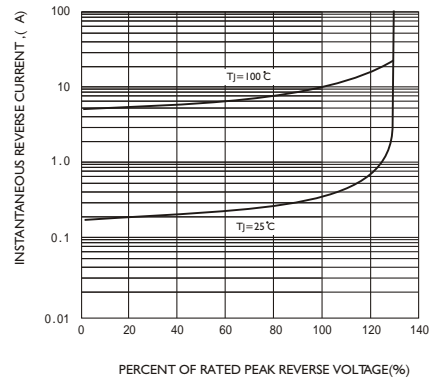


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

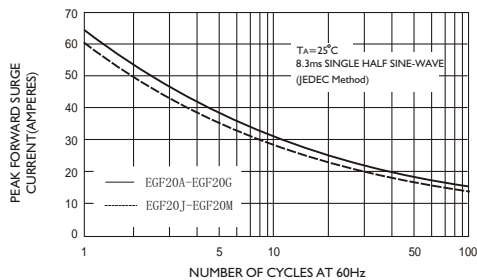


FIG.6-TYPICAL JUNCTION CAPACITANCE

