SEMICONDUCTOR

GPRC

EGF20A THRU EGF20M

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

SILICON RECTIFIER

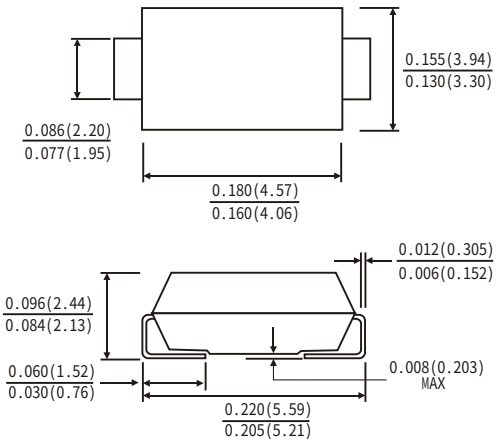
FEATURES



- 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_{RRM}	50	100	200	300	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	480	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	Volts
Maximum Average Forward Rectified Current 0.375"(9.5mm)lead Length at T_a=55 C °	$I_{(AV)}$	2.0								Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	65.0					60.0			Amps
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	0.95				1.25	1.7			Volts
Maximum DC Reverse Current At Rated DC Blocking Voltage T_A=25°C	I_R	5.0								μA
T_A=100°C		100								
Maximum Reverse Recovery Time(Note1)	T_{rr}	50					75			ns
Typical Junction Capacitance(Note2)	C_J	45								pF
Operating Junction and Storage Temperature Range	T_J T_{STG}	-65 to+125 -65 to+150								℃

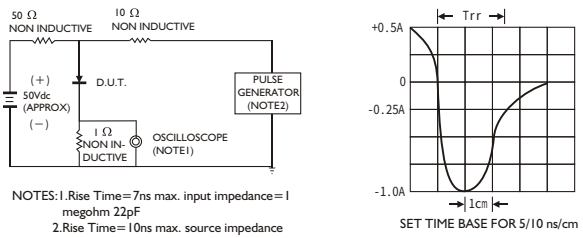
Note: 1.Test conditions: I_F=0.5A,I_R=1.0A,I_{RR}=0.25A.

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

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RATINGS AND CHARACTERISTIC CURVES EGF20A THRU EGF20M

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



NOTES: 1.Rise Time=7ns max. input impedance=1 megohm 22pF
2.Rise Time=10ns max. source impedance =50 ohms

SET TIME BASE FOR 5/10 ns/cm

FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

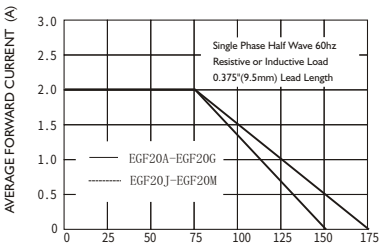


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

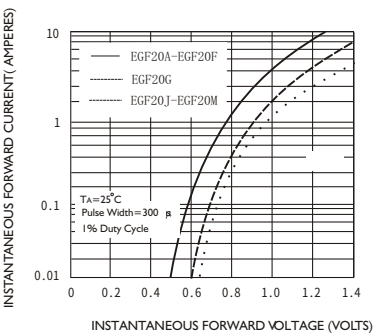


FIG.4-TYPICAL REVERSE CHARACTERISTICS

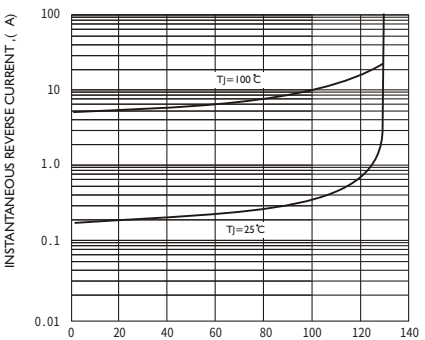


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

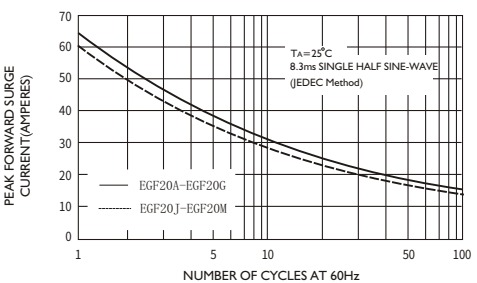
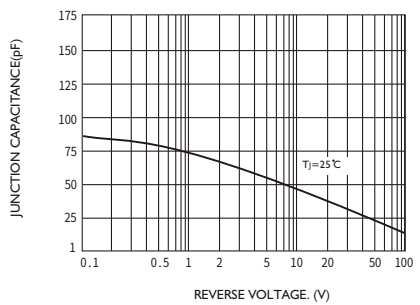


FIG.6-TYPICAL JUNCTION CAPACITANCE



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