



SEMICONDUCTOR

GPRC

GF20A THRU GF20M

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current -2.0Amperes

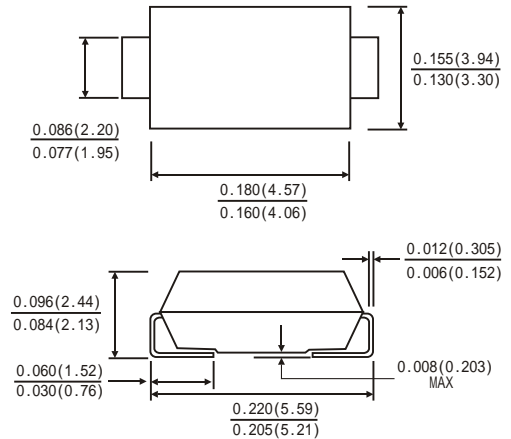
SILICON RECTIFIER

FEATURES

- GPRC(Glass Passivated Rectifier Chip) inside
- Glass passivated cavity-free junctionPlastic package has Underwriters Laboratory
- Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- High temperature soldering:
250° C/10 seconds at terminals



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

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

	Symbols	GF 20A	GF 20B	GF 20D	GF 20G	GF 20J	GF 20K	GF 20M	Units	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	300	400	600	200	1000	Volts	
Maximum RMS Voltage	V_{RMS}	35	70	210	280	420	140	700	Volts	
Maximum DC Blocking Voltage	V_{DC}	50	100	300	400	600	200	1000	Volts	
Maximum average Forward Rectified Current 0.375"(9.5mm)lead length at $T_A=75^\circ\text{C}$	$I(AV)$	2.0							Amps	
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	70.0							Amps	
Maximum Instantaneous Forward Voltage at 2.0 A	V_F	1.1							Volts	
Maximum Reverse current at rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$	5.0							μA
		$T_A=100^\circ\text{C}$	50.0							
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40.0							$^\circ\text{C/W}$	
Typical Junction Capacitance(Note 1)	C_J	20.0							pF	
Operating and Storage Temperature Range	T_J T_{STG}	-50 to+175							$^\circ\text{C}$	

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length , P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES GF2A THRU GF2M

FIG.1-FORWARD CURRENT DERATING CURVE

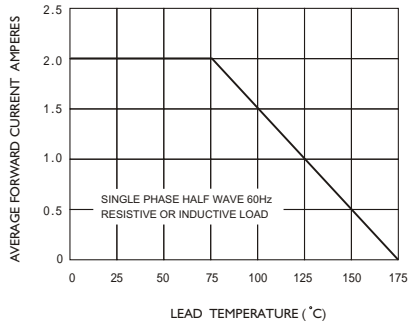


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

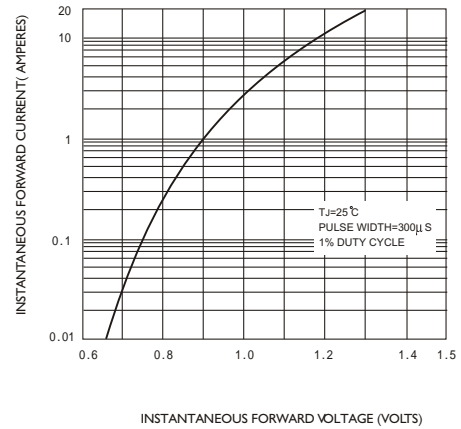


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

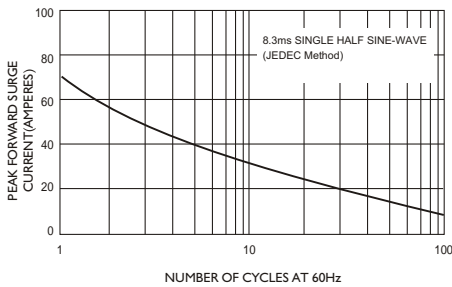


FIG.4-TYPICAL REVERSE CHARACTERISTICS

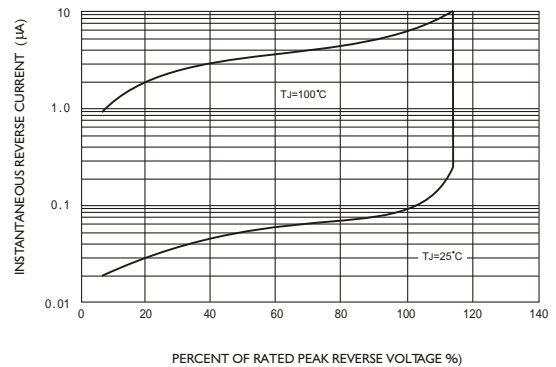


FIG.5-TYPICAL JUNCTION CAPACITANCE

