



SEMICONDUCTOR

GPRC

GP20A THRU GP20M

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current -2.0Amperes

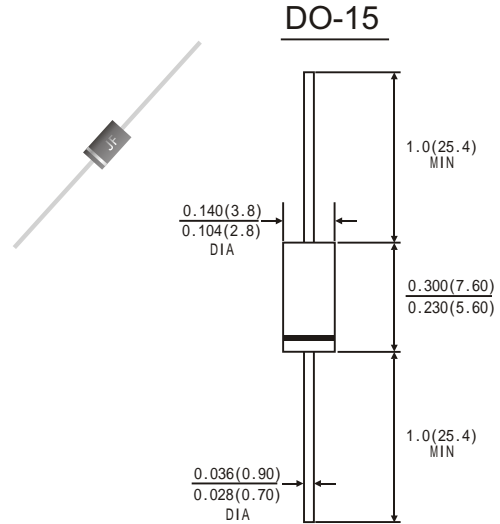
SILICON RECTIFIER

FEATURES

- GPRC(Glass Passivated Rectifier Chip) inside
- Glass passivated cavity-free junction
- Capable of meeting environmental standards of MIL-S-19500
- 2.0Ampere operation at Ta=75 and 55 with no thermal runaway
- Typical IR less than 0.1uA
- High temperature soldering guaranteed:260 °10 seconds
- Plastic Package has Under writers Laboratory Flammability Classification 94V-0

MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014ounce, 0.39 gram



Dimensions in inches and (millimeters)

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	GP 20A	GP 20B	GP 20D	GP 20G	GP 20J	GP 20K	GP 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 C	I(AV)	2.0							Amps
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	65.0							Amps
Maximum Instantaneous Forward Voltage at 2.0 A	V _F	1.0							Volts
Maximum Reverse current at rated DC Blocking Voltage	I _R	5.0							μA
		50.0							
Typical Thermal Resistance (Note 2)	R _{θJA}	25.0							°C/W
Typical Junction Capacitance(Note 1)	C _J	25.0							pF
Operating and Storage Temperature Range	T _J	-50 to+175							°C
	T _{STG}								

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 GP20A THROUGH GP20M

FIG.1-FORWARD CURRENT DERATING CURVE

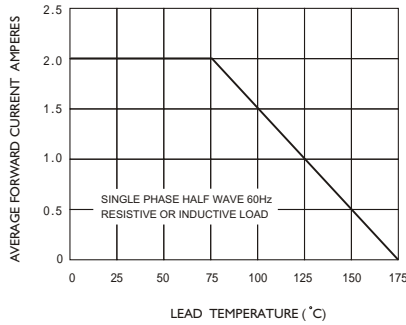


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

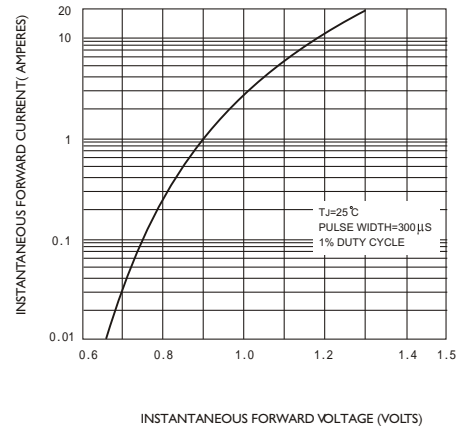


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

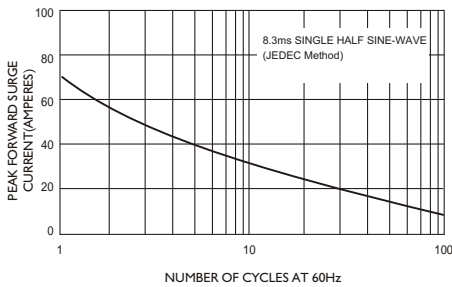


FIG.4-TYPICAL REVERSE CHARACTERISTICS

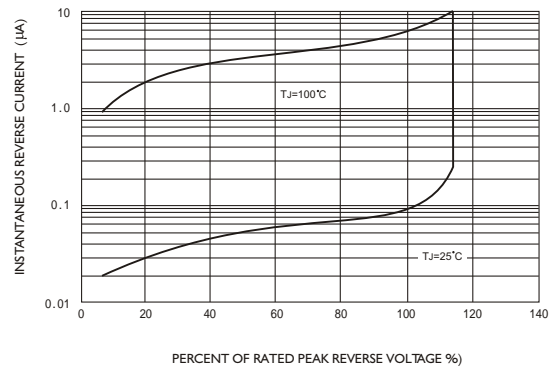


FIG.5-TYPICAL JUNCTION CAPACITANCE

