

SFF2005GA

Isolated 20.0Amps Glass Passivated Super Fast Rectifier **ITO-220AB**

RoHS



Features

- High efficiency, low VF ∻
- High current capability ∻
- ∻ High reliability
- ♦ High surge current capability
- ♦ Low power loss
- For use in low voltage, high frequency inventor, ∻ Free wheeling, and polarity protection application
- ♦ Green compound with suffix "G" on packing code & prefix "G" on datecode

Mechanical Data

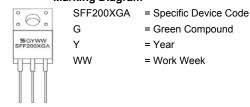
- Case: ITO-220AB Molded plastic ♦
- ♦ Epoxy: UL 94V-0 rate flame retardant
- ♦ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ♦ Polarity: As marked
- ∻ High temperature soldering: 260°C/10 seconds/.16",(4.06mm) from case
- ♦ Weight: 1.75 grams

Maximum Ratings and Electrical Characteristics

Rating at 25 $^\circ\!\mathrm{C}$ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

| .185(4.7) .168(4.3) .098(2.5) | _406(10 _374(9.0 _134(3.4 _113(3.0 | 4)DIA | <u>.125(3.2)</u> .936(2.4) |
|--|--|--|-------------------------------|
| | <u>.272(6.9)</u> .248(6.3) | <u>×</u> | .606(15.5) .583(14.8) |
| . <u>117(2.96).</u> .090(2.3) .030(0.76) .018(0.46) | .057(1.45) .037(0.95) .035(0.9) .020(0.5) | | 1 |
| Dimo | .100(2.54) TYP .105(2.67) .095(2.41) PIN 1 OH PIN 3 OH | .100(2.54) .105(2.67) .095(2.41) .095(2.41) .095(2.41) | 7) |

Dimensions in inches and (millimeters) Marking Diagram



= Green Compound

- = Work Week

| Type Number | Symbol | SFF2005GA | Unit |
|--|--------------------|---------------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 300 | V |
| Maximum RMS Voltage | V _{RMS} | 210 | V |
| Maximum DC Blocking Voltage | V _{DC} | 300 | V |
| Maximum Average Forward Rectified Current @Tc=100 $^\circ$ C | I _{F(AV)} | 20 | А |
| Peak Forward Surge Current, 8.3 ms Single Half Sine- wave Superimposed on Rated Load (JEDEC method) | I _{FSM} | 150 | A |
| Maximum Instantaneous Forward Voltage @ 10A | V _F | 1.3 | V |
| Maximum Reverse Current @ Rated VR $T_A=25$ °C (Note 1) $T_A=100$ °C | I _R | 10 400 | uA |
| Maximum Reverse Recovery Time (Note 2) | Trr | 35 | nS |
| Typical Junction Capacitance (Note 3) | Cj | 90 | pF |
| Typical Thermal Resistance | R _{ejC} | 7 | °C/W |
| Operating Temperature Range | TJ | - 65 to + 150 | °C |
| Storage Temperature Range | T _{STG} | - 65 to + 150 | °C |
| Note 1: Pulse Test with PM-300 uses 1% Duty Cycle | · · | | |

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Version:A10



RATINGS AND CHARACTERISTIC CURVES (SFF2005GA)

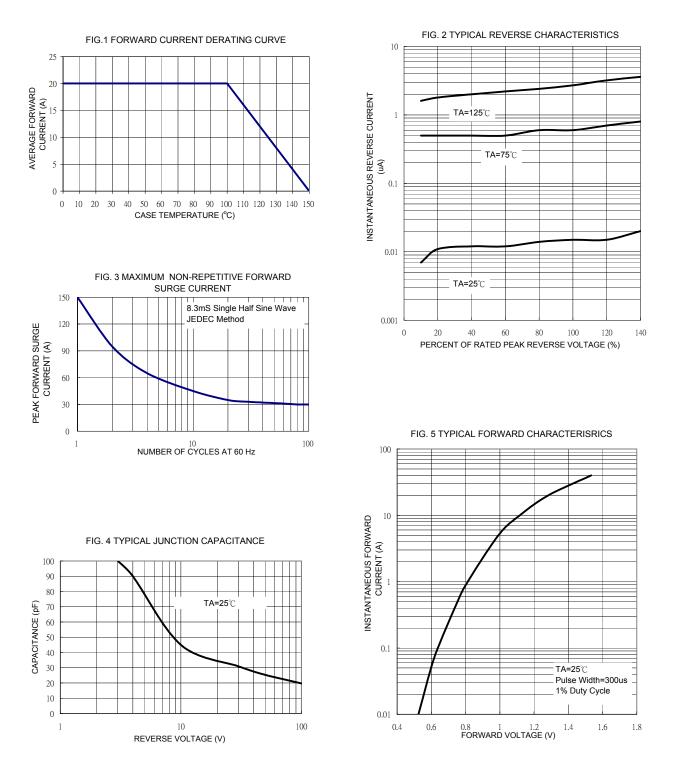


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

