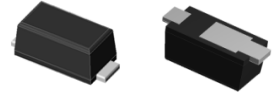


Features

- Glass passivated superfast recovery Rectifiers
- Low profile, typical thickness 0.8mm
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Heatsink structure
- High temperature soldering guaranteed: 260°C/10 seconds



Package: iSGA
 (SOD-123HS)



RoHS
 COMPLIANT

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

| Parameter | Symbol | GSPU1 | GSPU2 | GSPU3 | GSPU4 | GSPU5 | Unit |
|--|-----------------------------------|---------------|-------|-------|-------|-------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | V |
| Maximum Average Forward Rectified Current | I _{F(AV)} | 1 | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine- Wave Superimposed on Rated Load | I _{FSM} | 30 | | | | | A |
| Operating Junction and Storage Temperature Range | T _J , T _{STG} | - 55 to + 150 | | | | | °C |

Electrical Characteristics (T_A=25°C unless otherwise noted)

| Parameter | Test Conditions | Symbol | GSPU1 | GSPU2 | GSPU3 | GSPU4 | GSPU5 | Unit |
|---|---|--------------------------------|------------|-------|-------|-------|-------|------|
| Minimum Breakdown Voltage | T _A =25°C, I _R =100uA | V _{BR} | 200 | | | 400 | 600 | V |
| Maximum Instantaneous Forward Voltage | 1 A | V _F | 0.95 | | | 1.3 | 1.7 | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | T _A =25°C T _A =125°C | I _R | 5.0 100 | | | | | μA |
| Maximum Reverse Recovery Time | I _F =0.5A, I _R =1.0A, I _{rr} =0.25A | t _{rr} | 35 | | | | | nS |
| Typical Junction Capacitance | 4.0 V, 1 MHz | C _J | 7 | | | | | pF |
| Typical Thermal Resistance | Juntion to Ambient | R _{θJA} ¹⁾ | 63 | | | | | °C/W |
| | Juntion to Lead | R _{θJL} ¹⁾ | 9 | | | | | |
| | Juntion to Case | R _{θJC} ²⁾ | 39 | | | | | |

Note:1),The thermal resistance from junction to ambient or lead, mounted on P.C.B with 5×5mm copper pads,2 OZ,FR4 PCB

2),The thermal resistance from junction to case, mounted on P.C.B with recommended copper pads,2 OZ,FR4 PCB

Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

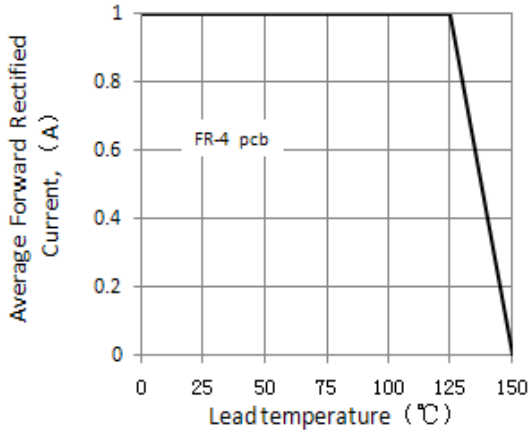


Figure 1. Forward Current Derating Curve

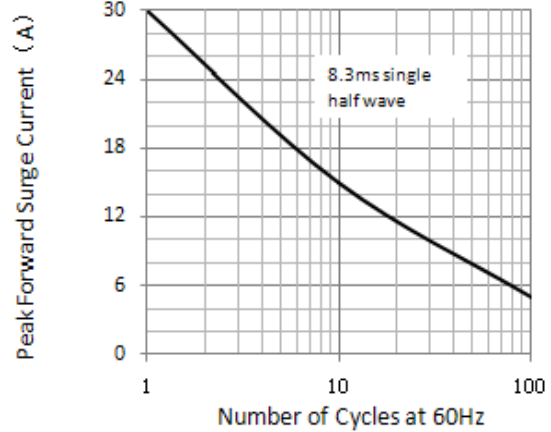


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

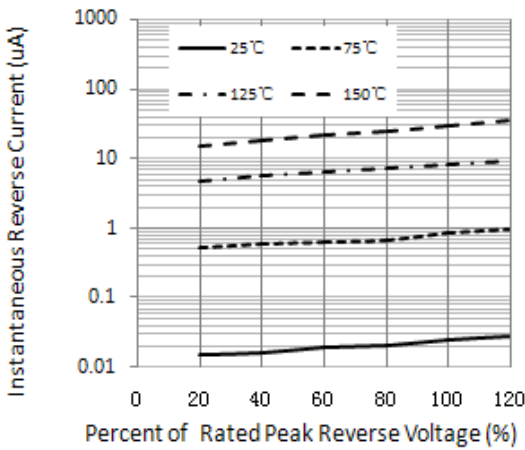


Figure 3. Typical Reverse Characteristics

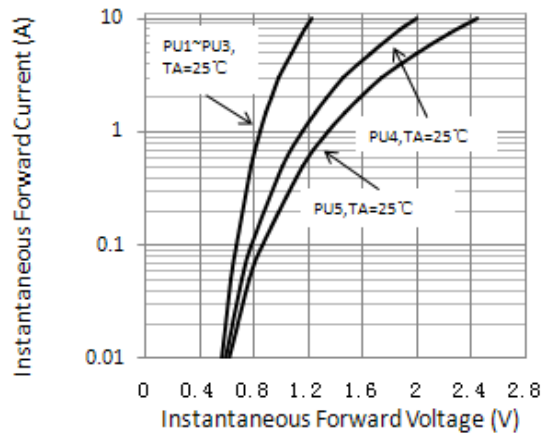


Figure 4. Typical Instantaneous Forward Characteristics

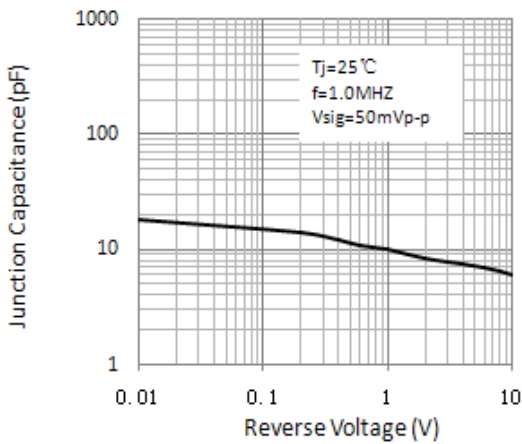


Figure 5. Typical Junction Capacitance

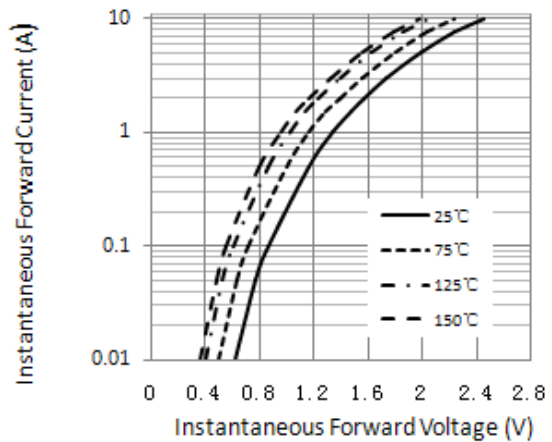
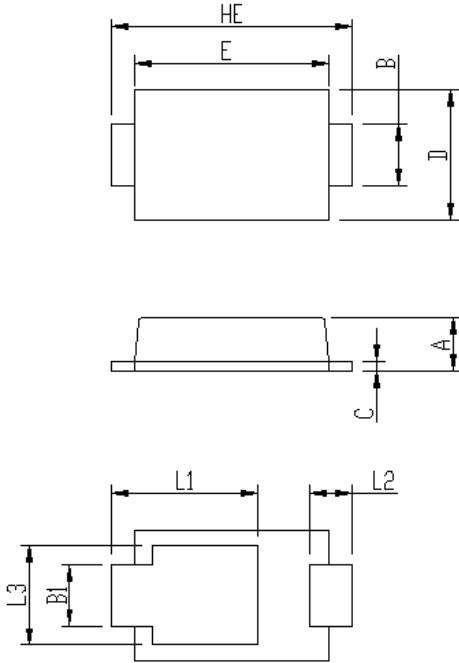


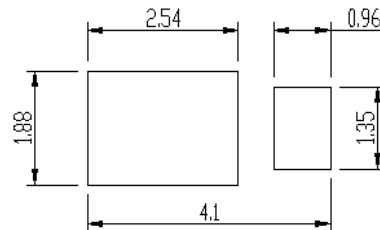
Figure 6. Typical Instantaneous Forward Characteristics (PU5)

Package Outline Dimensions



| Package | iSGA | |
|---------|---------|------|
| | Unit:mm | |
| A | MIN | MAX |
| A | 0.75 | 0.90 |
| B | 0.85 | 1.05 |
| B1 | 0.85 | 1.05 |
| C | 0.1 | 0.25 |
| D | 1.9 | 2.1 |
| E | 2.9 | 3.1 |
| L1 | 2.0 | 2.45 |
| L2 | 0.4 | 0.85 |
| L3 | 1.3 | 1.7 |
| HE | 3.5 | 3.9 |

Soldering footprint



Packing Information

Packing quantities

| Reel size | Quantity/reel | Quantity/inner Box | Quantity/Carton |
|-----------|---------------|--------------------|-----------------|
| 7" | 3K | 30K | 120K |

Tape & Reel Specification

