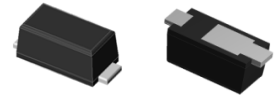


Features

- Low V_F Schottky rectifier
- Low profile, typical thickness 0.8mm
- 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)



Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | GPL24 | Unit |
|--|-------------|---------------|------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 40 | V |
| Maximum RMS voltage | V_{RMS} | 28 | V |
| Maximum DC blocking voltage | V_{DC} | 40 | V |
| Maximum average forward rectified current | $I_{F(AV)}$ | 2.0 | A |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | I_{FSM} | 50 | A |
| Operating junction temperature range | T_J | - 55 to + 125 | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | - 55 to + 150 | $^\circ\text{C}$ |

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

| Parameter | Test Conditions | Symbol | GPL24 | Unit |
|---|---------------------------------------|-----------------|-------|---------------------------|
| Maximum instantaneous forward voltage | $I_F=1\text{A}, T_A=25^\circ\text{C}$ | V_F | 0.40 | V |
| | $I_F=2\text{A}, T_A=25^\circ\text{C}$ | | 0.45 | |
| Maximum DC reverse current at rated DC blocking voltage | $T_A=25^\circ\text{C}$ | I_R | 200 | μA |
| | $T_A=100^\circ\text{C}$ | | 20 | mA |
| Typical junction capacitance | 4.0 V, 1 MHz | C_J | 120 | pF |
| Typical thermal resistance ¹⁾ | junction to ambient | $R_{\theta JA}$ | 100 | $^\circ\text{C}/\text{W}$ |
| | junction to case | $R_{\theta JC}$ | 50 | |
| | junction to mount | $R_{\theta JM}$ | 25 | |

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

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

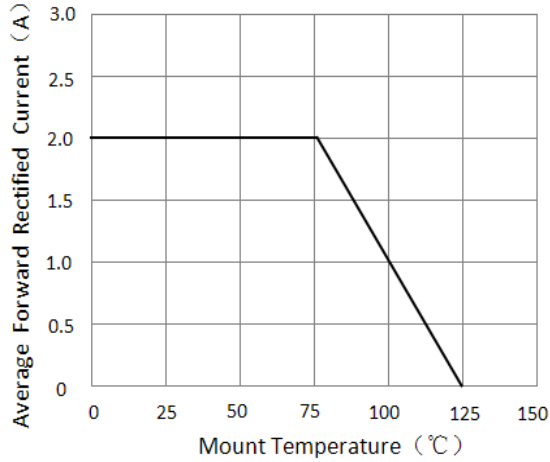


Figure 1. Forward Current Derating Curve

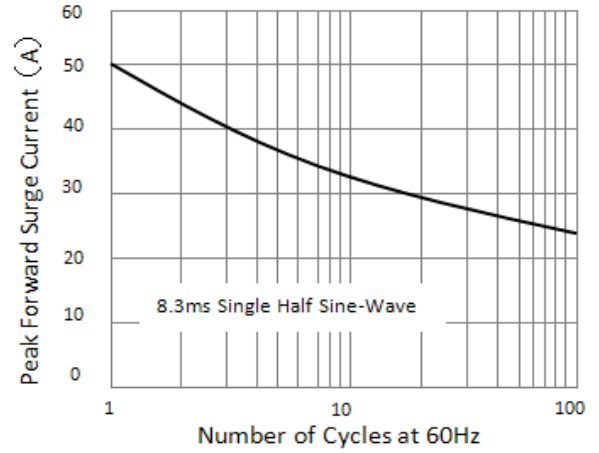


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

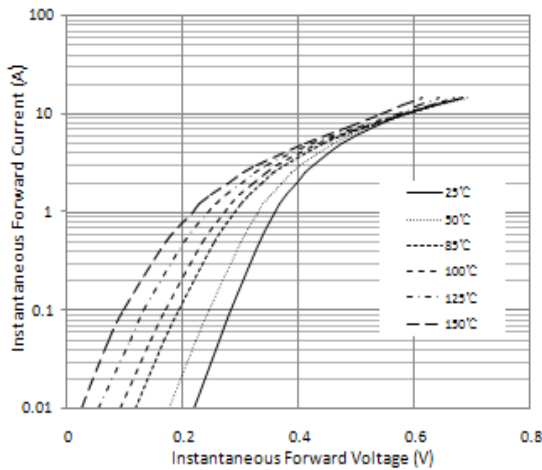


Figure 3. Typical Instantaneous Forward Characteristics

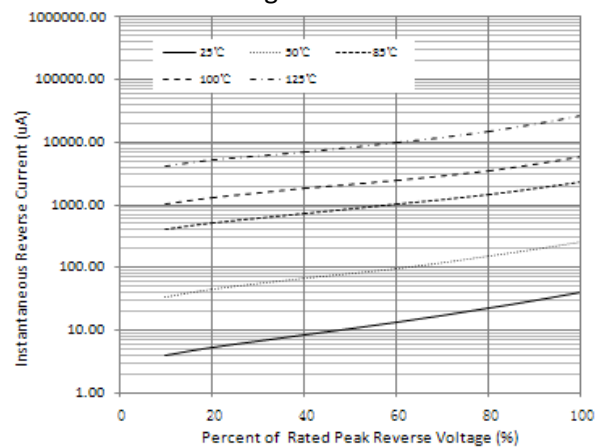


Figure 4. Typical Reverse Characteristics

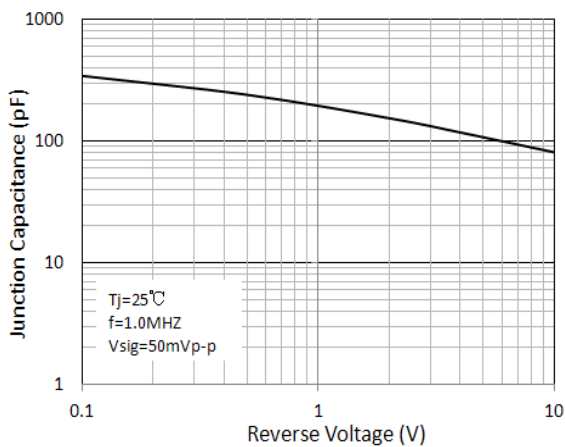
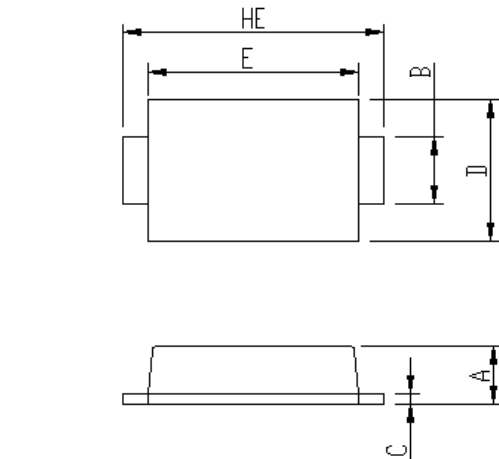


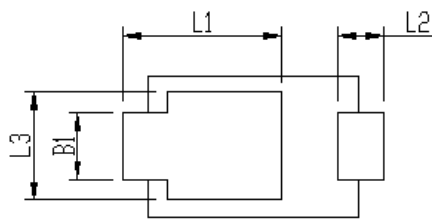
Figure 5. Typical Junction Capacitance

Package Outline Dimensions

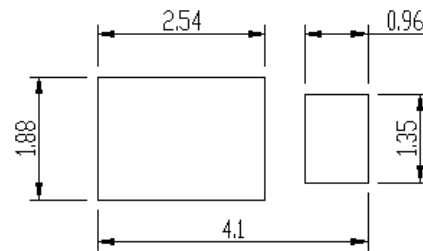
iSGA(SOD-123HS)



| Package | iSGA(SOD-123HS) | |
|---------|-----------------|------|
| Unit:mm | 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



Package Information

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

Tape & Reel Specification

