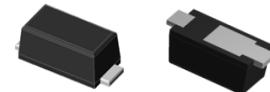


Features

- Super Low VF Schottky barrier diodes
- 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)



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

Parameter	Symbol	GP17	GP18	GP19	GP1100	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	70	80	90	100	V
Maximum RMS voltage	V_{RMS}	49	56	63	70	V
Maximum DC blocking voltage	V_{DC}	70	80	90	100	V
Maximum average forward rectified current	$I_{F(AV)}$			1.0		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}			30		A
Rating for fusing($t < 8.3\text{ms}$)	I^2t			3.8		A^2sec
Operating junction temperature range	T_J			- 55 to + 150		°C
Storage temperature range	T_{STG}			- 55 to + 150		°C

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

Parameter	Test Conditions	Symbol	Value	Unit
Minimum breakdown voltage	$T_A=25^\circ\text{C}, I_R=1\text{mA}$	V_{BR}	100	
Maximum instantaneous forward voltage	$I_F=1\text{A} \quad T_A=25^\circ\text{C}$	V_F	0.80	V
	$I_F=1\text{A} \quad T_A=125^\circ\text{C}$		0.65	
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	I_R	1.0	μA
	$T_A=125^\circ\text{C}$		150	
Typical junction capacitance	4.0 V, 1 MHz	C_J	28	pF
Typical thermal resistance	junction to ambient	$R_{\theta JA}^{(1)}$	65	°C/W
	junction to lead	$R_{\theta JL}^{(1)}$	9	
	junction to case	$R_{\theta JC}^{(2)}$	35	

Note:1),The thermal resistance from junction to ambient or lead, mounted on P.C.B with 5x5mm 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

Typical Electrical Characteristic Curves

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

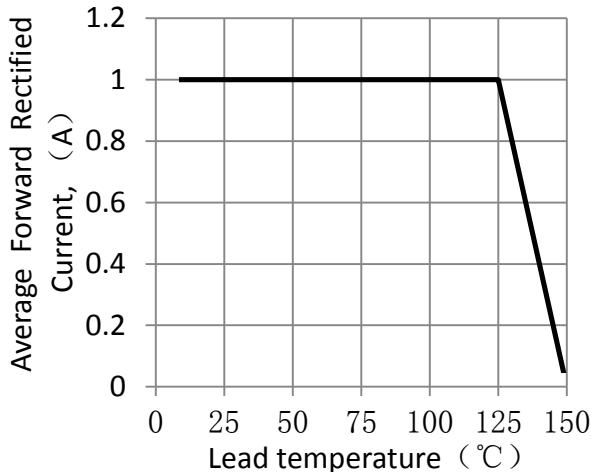


Figure 1. Forward Current Derating Curve

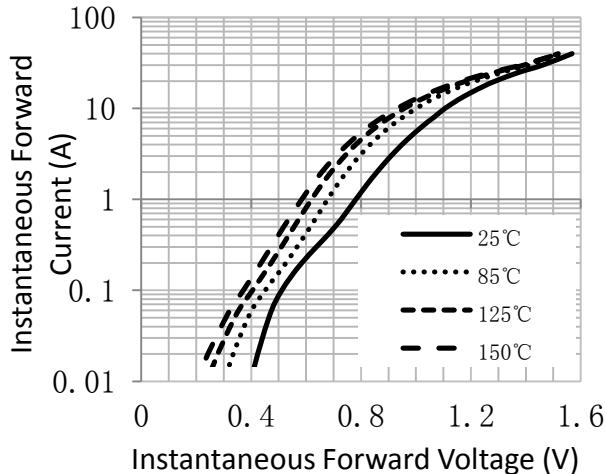


Figure 3. Typical Instantaneous Forward Characteristics

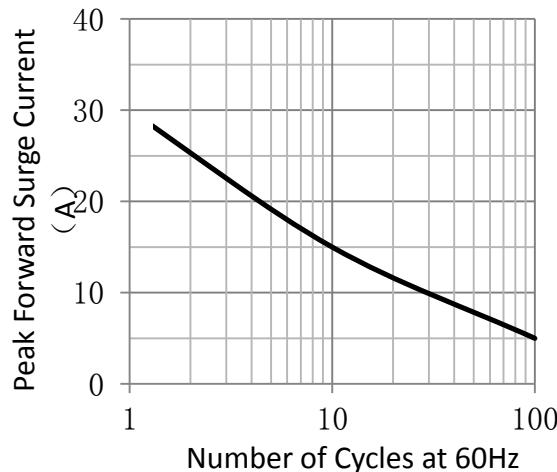


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

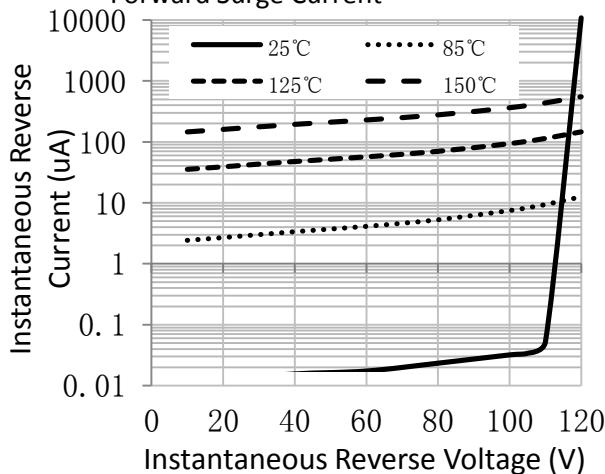


Figure 4. Typical Reverse Characteristics

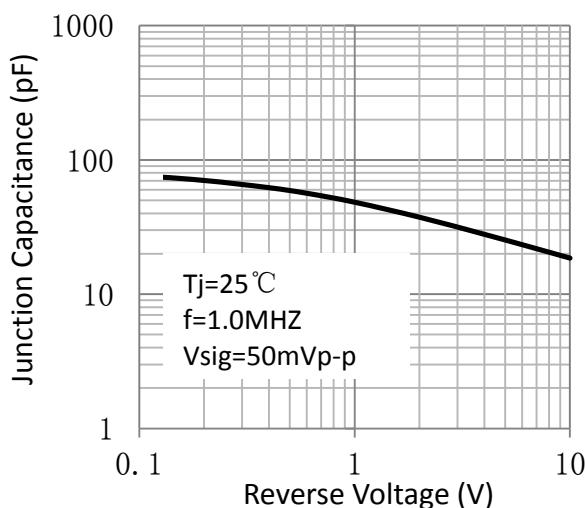
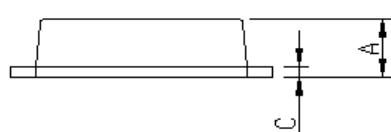
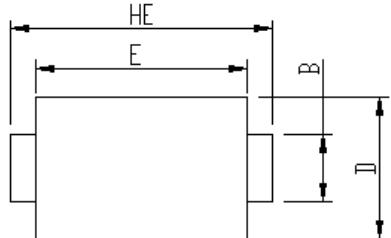


Figure 5. Typical Junction Capacitance

GP17 thru GP1100

Surface Mount Schottky Rectifier
Reverse Voltage 70-100V Forward Current 1.0A

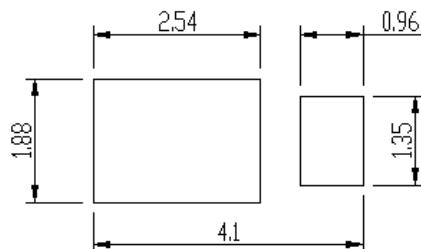
Package Outline Dimensions



iSGA
(SOD-123HS)

Package	iSGA	
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



Packing Information

Packing Quantities

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

Tape & Reel Specification

