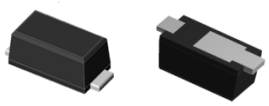
GOOD-ARK
SEMICONDUCTOR

GSPSL32 thru GSPSL34

Surface Mount Schottky Rectifier
Reverse Voltage 20-40V Forward Current 3A

Features

- Heatsink structure
- Low profile, typical thickness 0.8mm
- Low forward voltage drop
- Super Low VF Schottky barrier diodes
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260℃/10 seconds



Package: iSGA

(SOD-123HS)

RoHS
COMPLIANT

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

Parameter	Symbol	GSPSL32	GSPSL33	GSPSL34	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Maximum average forward rectified current	$I_{F(AV)}$	3.0			A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	80			A
Rating for fusing(t＜8.3ms)	I^2t	26.7			A^2sec
Operating junction temperature range	T_J	- 55 to + 150			℃
Storage temperature range	T_{STG}	- 55 to + 150			℃

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

Parameter	Test Conditions	Symbol	GSPSL32	GSPSL33	GSPSL34	Unit
Minimum breakdown voltage	T_A=25℃, I_R=1mA	V_{BR}	40			V
Maximum instantaneous forward voltage	I_F=1A,T_A=25°C	V_F	0.4 (typ.:0.36)			
	I_F=2A,T_A=25°C		- (typ.:0.40)			
	I_F=3A,T_A=25°C		0.45 (typ.:0.42)			
	I_F=3A,T_A=125°C		0.38			
Maximum DC reverse current at rated DC blocking voltage	T_A=25℃	I_R	150			uA
	T_A=125℃		30			mA
Typical junction capacitance	4.0 V, 1 MHz	C_J	210			pF
Typical thermal resistance[1)]	juntion to ambient	$R_{\theta JA}$[1)]	60			℃/W
	juntion to lead	$R_{\theta JL}$[1)]	6			
	juntion to case	$R_{\theta JC}$[2)]	28			

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

Typical Electrical Characteristic Curves

(T_A = 25°C unless otherwise noted)

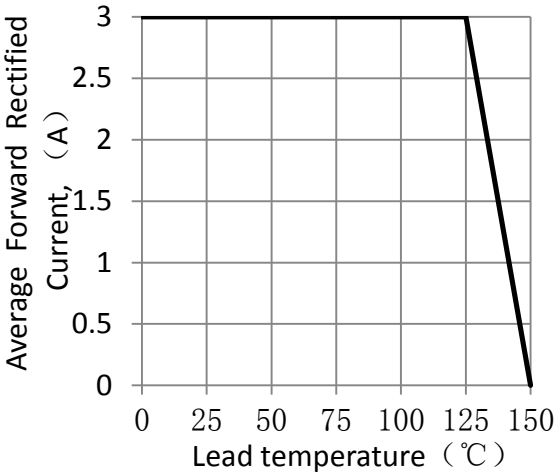


Figure 1.Forward Current Derating Curve

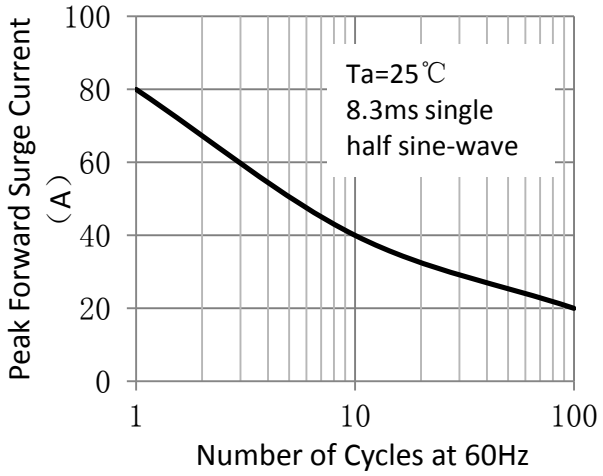


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

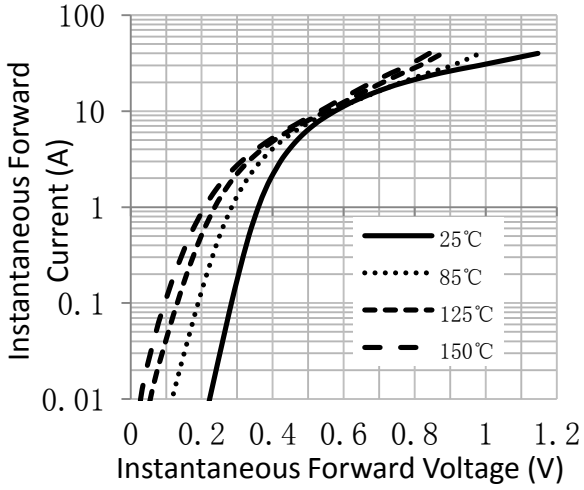


Figure 3. Typical Instantaneous Forward Characteristics

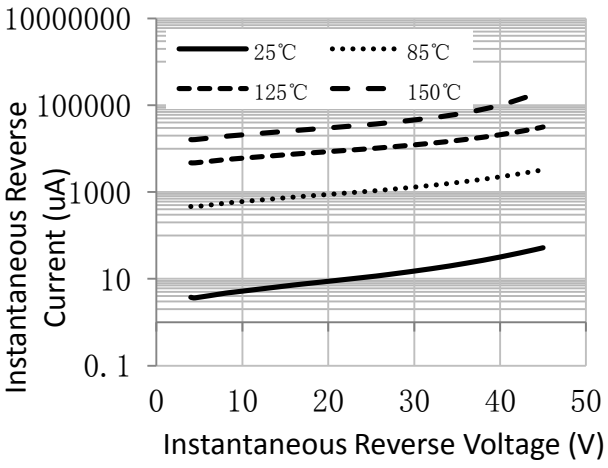


Figure 4. Typical Reverse Characteristics

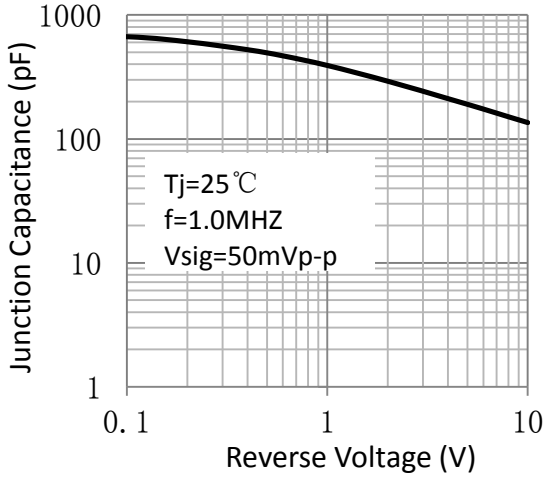
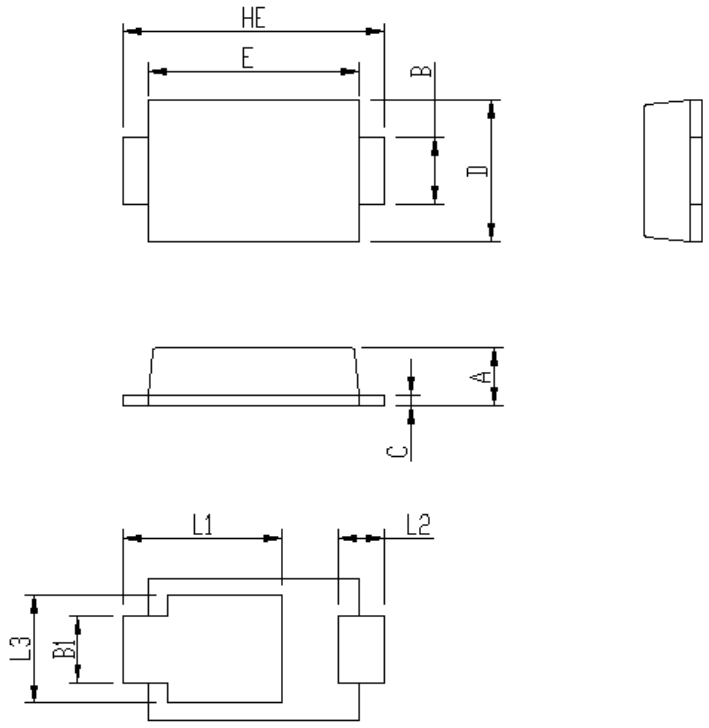


Figure 5. Typical Junction Capacitance

GSPSL32 thru GSPSL34

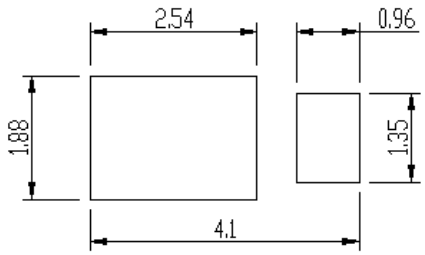
Surface Mount Schottky Rectifier
Reverse Voltage 20-40V Forward Current 3A

Package Outline Dimensions



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