

Surface Mount Schottky Rectifier Reverse Voltage 50~60V Forward Current 3.0A

Features

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



iSGA (SOD-123HS)

Typical Applications

For use of fast swiching in RF module, lighting, cellular phone, portable device, power supplies and other consumer applications.

Maximum Ratings (TA = 25 °C unless otherwise noted)					
Parameter	Symbol	PS35	PS36	Unit	
Maximum repetitive peak reverse voltage	VRRM	50	60	V	
Maximum RMS voltage	VRMS	35	42	V	
Maximum DC blocking voltage	VDC	50	60	V	
Maximum average forward rectified current	IF(AV)	3.0		А	
Peak forward surge current 8.3 ms single half sinewave superimposed on rated load	IFSM	100		А	
Rating for fusing(t<8.3ms)	l ² t	41.70		A ² sec	
Operating junction temperature range	T_J	- 55 to + 150		°C	
Storage temperature range	T _{STG}	- 55 to + 150		°C	

Electrical Characteristics (TA = 25 °C unless otherwise noted)						
Parameter	Test Conditions	Symbol	ymbol Typ. Max.		Unit	
Minimum Breakdown voltage	Ta=25°C,IR=1mA	V_{BR}	60			
Instantaneous forward voltage	IF=3A,Ta=25℃	V _F	0.61	0.65	Volts	
	IF=3A,Ta=125℃		0.52	0.60		
Instantaneous reverse current	Ta=25°C	I _R	4.1	50	uA	
at rated DC blocking voltage	Ta=125°C		3.8	10	mA	
Typical junction capacitance	4.0 V, 1 MHz	CJ	160		pF	
Typical thermal resistance	juntion to ambient	R _{0JA} 1)	60			
	juntion to lead	R _{θJL} ¹⁾	6		°C/W	
	juntion to case	R _{θJC} ²⁾	2	8		

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

Surface Mount Schottky Rectifier Reverse Voltage 50~60V Forward Current 3.0A

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

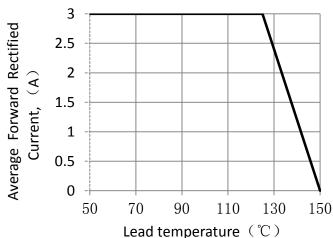


Figure 1. Forward Current Derating Curve

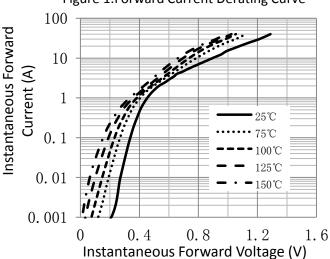


Figure 3. Typical Instantaneous Forward Characteristics

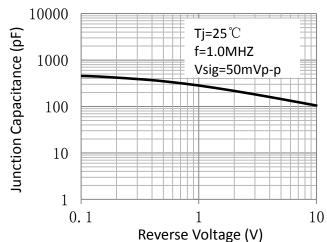


Figure 5. Typical Junction Capacitance

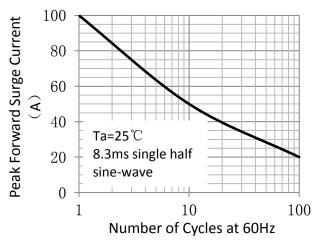


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

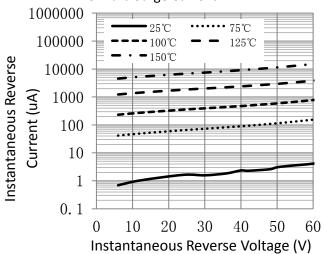
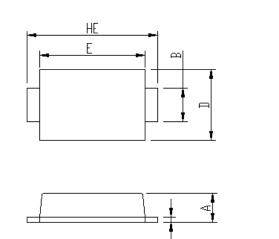


Figure 4. Typical Reverse Characteristics

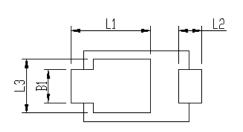
Surface Mount Schottky Rectifier Reverse Voltage 50~60V Forward Current 3.0A

Package Outline Dimensions



Package	iSGA		
Unit:mm	MIN	MAX	
Α	0.75	0.90	
В	0.85	1.05	
B1	0.85	1.05	
С	0.1	0.25	
D	1.9	2.1	
Е	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



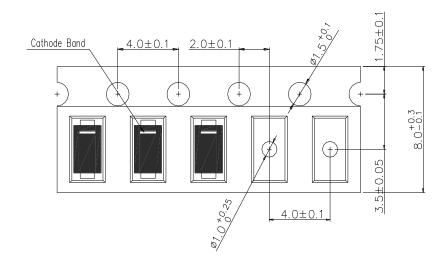
	 2.54	-	-	=	0.96
1.88					1,35
<u> </u>		4.1			

Packing Information

Packing quantities:

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

Tape & Reel Specification





Surface Mount Schottky Rectifier Reverse Voltage 50~60V Forward Current 3.0A

Disclaimers

These materials are intended as a reference to assist our customers in the selection of the Suzhou Good-Ark product best suited to the customer's application; they do not convey any license under any intellectual property rights, or any other rights, belonging to Suzhou Good-Ark Electronics Co., Ltd.or a third party.

Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, or infringement of any third-party's rights, originating in the use of any product data, diagrams, charts, programs, algorithms, or circuit application examples contained in these materials.

All information contained in these materials, including product data, diagrams, charts, programs and algorithms represents information on products at the time of publication of these materials, and are subject to change by Suzhou Good-Ark Electronics Co., Ltd. without notice due to product improvements or other reasons. It is therefore recommended that customers contact Suzhou Good-Ark Electronics Co., Ltd. or an authorized Suzhou Good-Ark Electronics Co., Ltd. for the latest product information before purchasing a product listed herein. The information described here may contain technical inaccuracies or typographical errors. Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, liability, or other loss rising from these inaccuracies or errors. Please also pay attention to information published by Suzhou Good-Ark Electronics Co., Ltd. by various means, including our website home page. (http://www.goodark.com)

When using any or all of the information contained in these materials, including product data, diagrams, charts, programs, and algorithms, Please be sure to evaluate all information as a total system before making a final decision on the applicability of the information and products. Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, liability or other loss resulting from the information contained herein.

The prior written approval of Suzhou Good-Ark Electronics Co., Ltd. is necessary to reprint or reproduce in whole or in part these materials.

Please contact Suzhou Good-Ark Electronics Co., Ltd. or an authorized distributor for further details on these materials or the products contained herein.