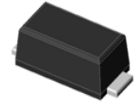


Features

- Low VF Schottky barrier diodes
- Low profile - typical height of 1.0 mm
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



eSGP(SOD-323F)



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

Parameter	Symbol	SPGPD520S	SPGPD540S	SPGPD560S	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	40	60	V
Maximum RMS voltage	V _{RMS}	14	28	42	V
Maximum DC blocking voltage	V _{DC}	20	40	60	V
Maximum average forward rectified current	I _{F(AV)}	0.5			A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	15			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	SPGPD520S	SPGPD540S	SPGPD560S	Unit
Maximum instantaneous forward voltage	0.5A	V _F	0.45	0.50	0.60	Volts
Maximum DC reverse current at rated DC blocking voltage	T _A = 25°C	I _R	80	80	50	uA
	T _A = 125°C		30			mA
Typical junction capacitance	4.0 V, 1 MHz	C _J	34	25	22	pF
Typical thermal resistance	junction to mount	R _{θJM}	55			°C/W

Note:1) The thermal resistance from junction to mount, mounted on P.C.B with 5x5mm copper pads, 2 OZ, FR4 PCB

Ratings and Characteristics Curves

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

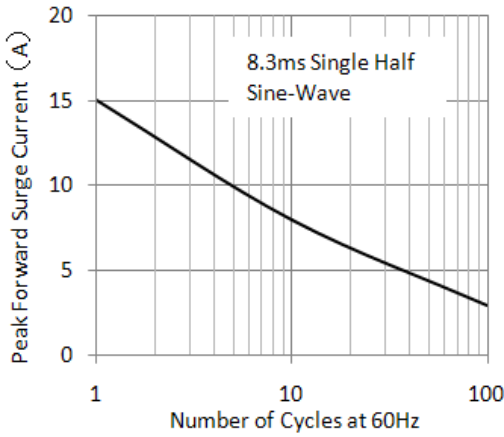


Figure 1. Maximum Non-Repetitive Peak Forward Surge Current

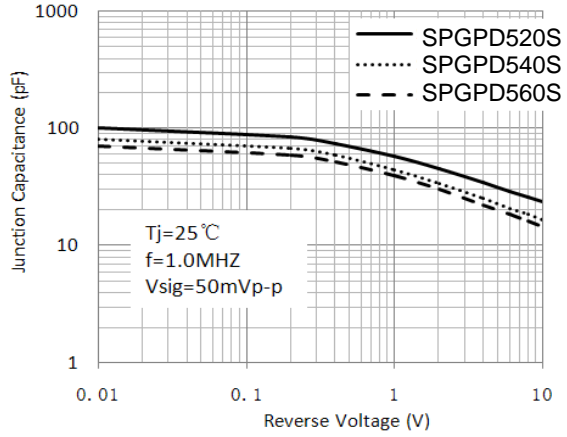


Figure 2. Typical Junction Capacitance

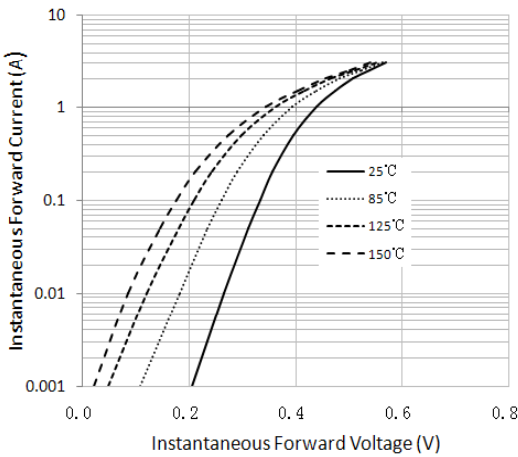


Figure 3. Typical Instantaneous Forward Characteristics (SPGPD520S)

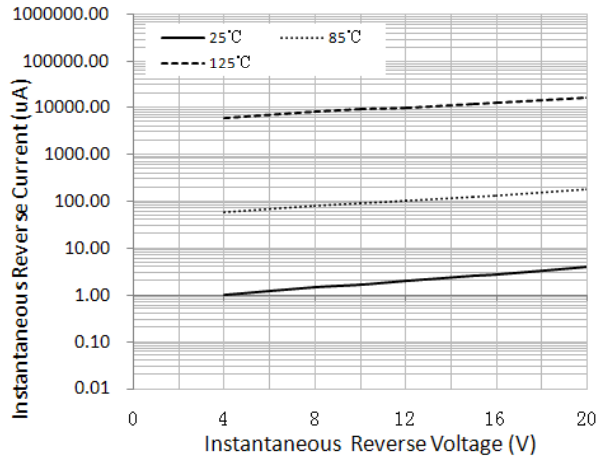


Figure 4. Typical Reverse Characteristics (SPGPD520S)

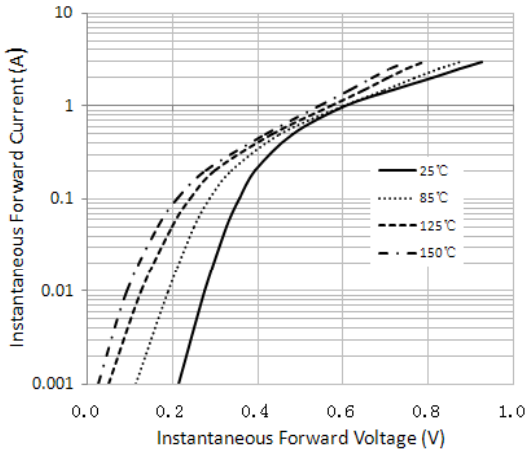


Figure 5. Typical Instantaneous Forward Characteristics (SPGPD540S)

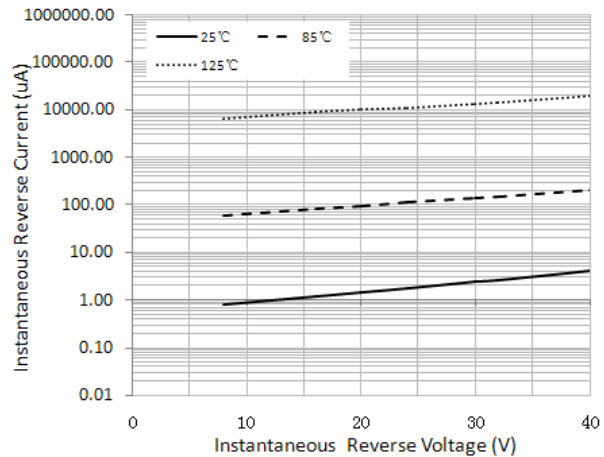


Figure 6. Typical Reverse Characteristics (SPGPD540S)

Ratings and Characteristics Curves

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

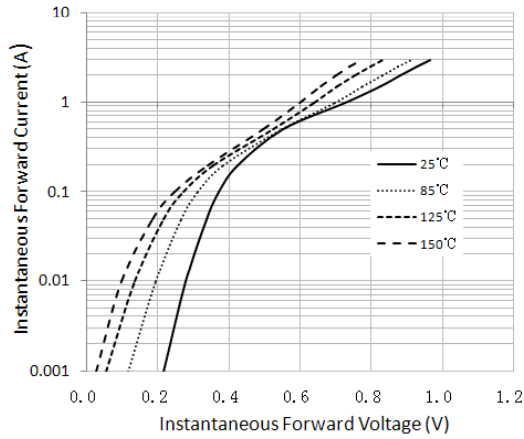


Figure 7. Typical Instantaneous Forward Characteristics (SPGPD560S)

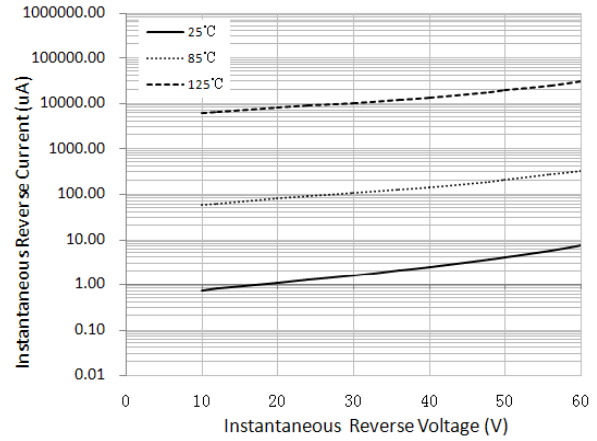
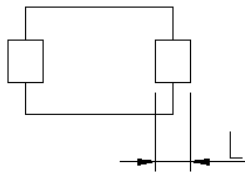
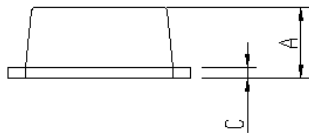
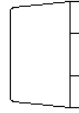
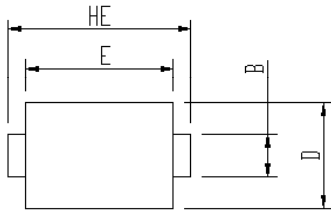


Figure 8. Typical Reverse Characteristics (SPGPD560S)

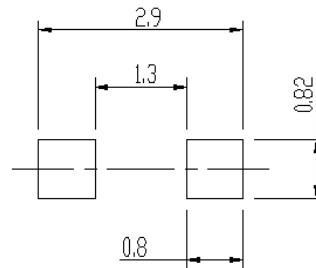
Package Outline Dimensions

eSGP(SOD-323F)



Package	Unit:mm		Unit:inch	
	MIN	MAX	MIN	MAX
A	0.9	1.08	0.035	0.043
B	0.5	0.7	0.020	0.028
C	0.1	0.25	0.004	0.010
D	1.4	1.6	0.055	0.063
E	2.0	2.2	0.079	0.087
L	0.35	0.65	0.014	0.026
HE	2.4	2.8	0.094	0.110

Soldering footprint



Packing Information

Packing quantities:

3000 pcs/Reel, 40 Reels/Box; 8mm Tape, 7" Reel

Tape & Reel Specification

