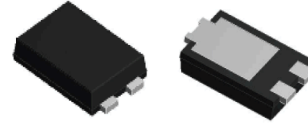


## Features

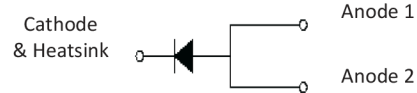
- Schottky barrier diodes
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile - typical height of 1.1 mm
- Heatsink design
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



RoHS  
COMPLIANT



eSGC (TO-277)



## Typical Applications

For low voltage high frequency inverters, DC/DC converters and polarity protection application.

### Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter	Symbol	SGC1060S	Unit
Maximum repetitive peak reverse voltage	VRRM	60	V
Maximum RMS voltage	VRMS	42	V
Maximum DC blocking voltage	VDC	60	V
Maximum average forward rectified current	IF(AV)	10.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	280	A
Operating junction and storage temperature range	TJ, TSTG	-55 to +150	°C

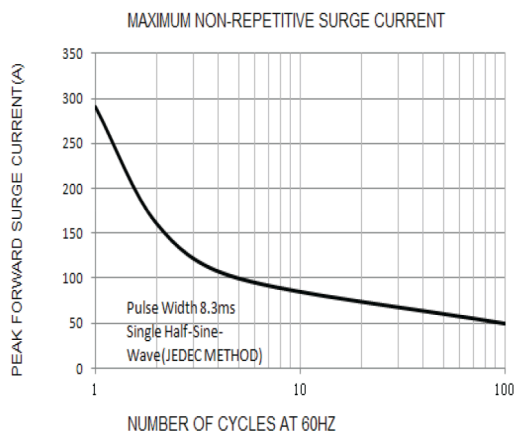
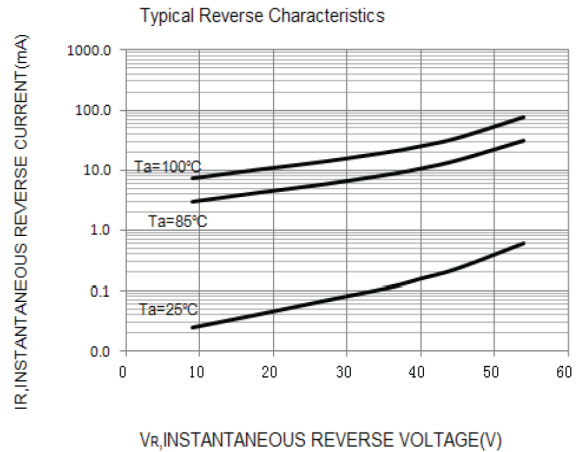
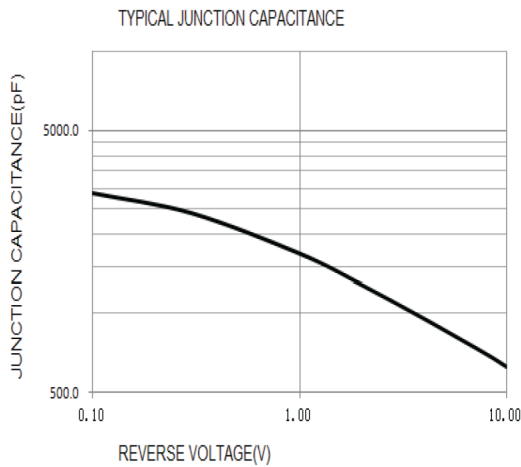
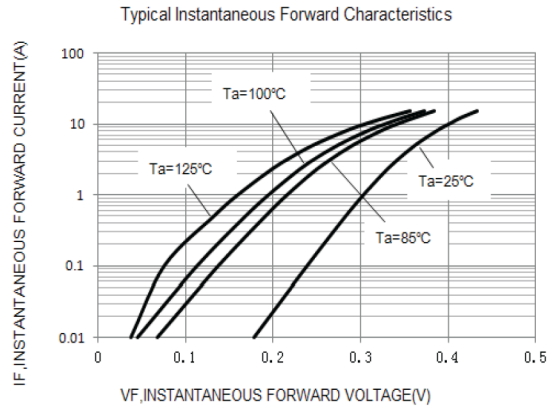
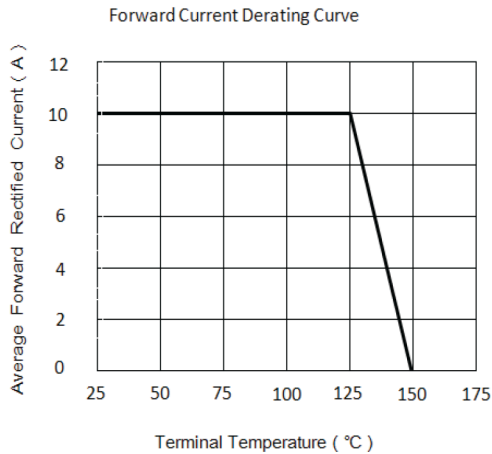
### Electrical Characteristics (TA = 25 °C unless otherwise noted)

Parameter	Test Conditions	Symbol	TYP.	MAX.	Unit	
Maximum instantaneous forward voltage	IF=1A IF=2A IF=10A	TA=25°C	VF	0.30	0.35	Volts
				0.33	0.38	
				0.45	0.5	
	IF=1A IF=2A IF=10A	TA=85°C		0.22	0.27	
				0.25	0.3	
				0.44	0.48	
	IF=1A IF=2A IF=10A	TA=125°C		0.16	0.20	
				0.20	0.24	
				0.43	0.46	
Maximum DC reverse current at rated DC blocking voltage	Rated VR	IR	0.18	0.3	mA	
			14	18		
			35	39		
Typical junction capacitance	4.0 V, 1 MHz	CJ	0.95		nF	
Typical thermal resistance <sup>1)</sup>	junction to lead	RθJL	20		°C/W	

Note1) Thermal resistance RθJL is junction to lead, mounted on P.C.B with 30\*30mm copper pad area

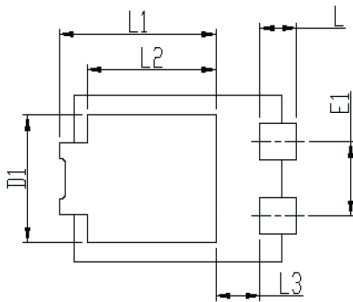
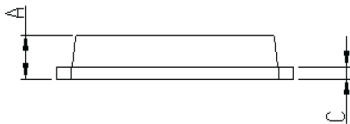
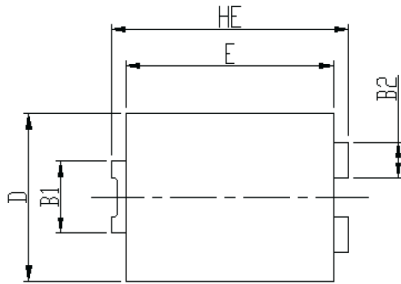
## Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)



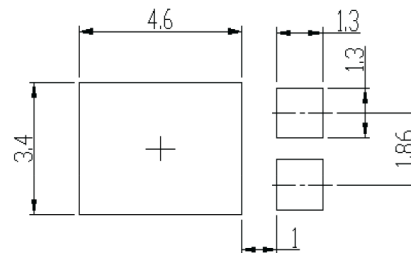
## Package Outline Dimensions

in inches (millimeters)



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
HE	6.4	6.6	0.252	0.260
E	5.6	5.8	0.220	0.228
D	4.1	4.3	0.161	0.169
B1	1.7	1.9	0.067	0.075
B2	0.8	1	0.031	0.039
A	1.05	1.2	0.041	0.047
C	0.3	0.4	0.012	0.016
L	0.85	1.1	0.033	0.043
L1	4.2	4.4	0.165	0.173
L2	3.52 Typ.		0.139 Typ.	
L3	1.1	1.4	0.043	0.055
D1	3	3.3	0.118	0.130
E1	1.86 Typ.		0.073 Typ.	

Soldering footprint



## Packing Information

### Packing quantities:

5000 pcs/Reel, 12mm Tape, 13" Reel

### Tape & Reel Specification

