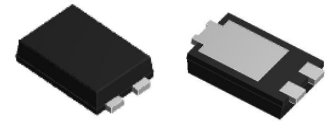
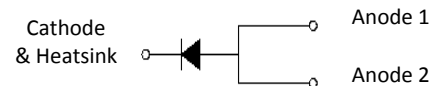


Features

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



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	SGC10CS	Unit
Maximum repetitive peak reverse voltage	VRRM	200	V
Maximum RMS voltage	VRMS	140	V
Maximum DC blocking voltage	VDC	200	V
Maximum average forward rectified current	IF(AV) ¹⁾	10.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	175	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	MAX.	Unit
Maximum instantaneous forward voltage	IF=10A	TA=25°C	VF	0.85	Volts
Maximum instantaneous reverse current	VR=200V	TA=25°C	IR	50	uA
		TA=125°C		20	mA
Typical junction capacitance	4.0 V, 1 MHz		CJ	206	pF
Typical thermal resistance	junction to mount		RθJM ¹⁾	5	°C/W

Note1) Thermal resistance R_{θJM} is junction to mount, mounted on P.C.B with 30*30mm copper pad area

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

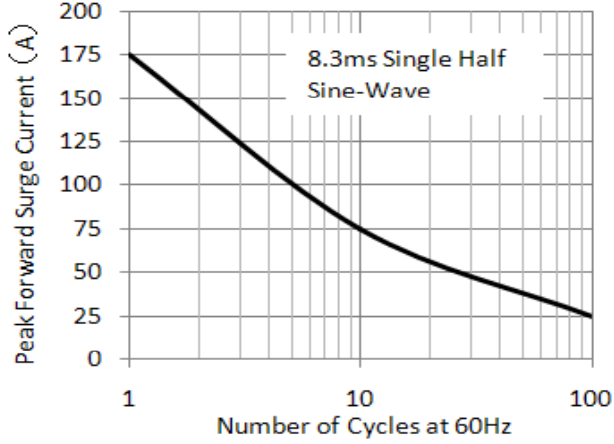


Figure 1. Maximum Non-Repetitive Peak Forward Surge Current

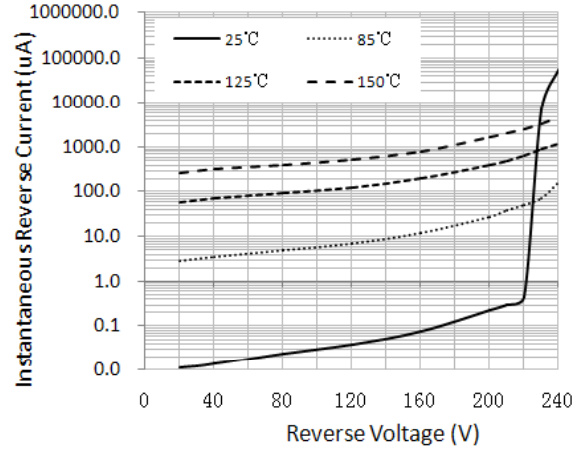


Figure 2. Typical Reverse Characteristics

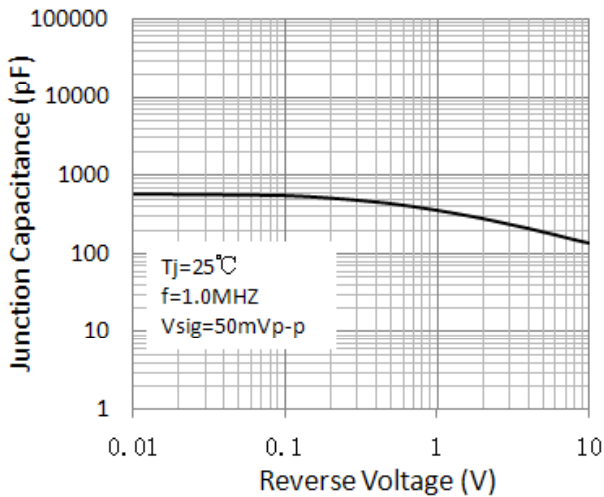


Figure 3. Typical Junction Capacitance

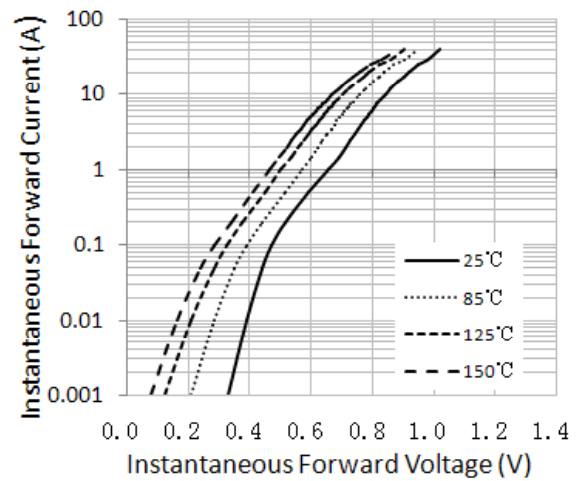


Figure 4. Typical Instantaneous Forward Characteristics

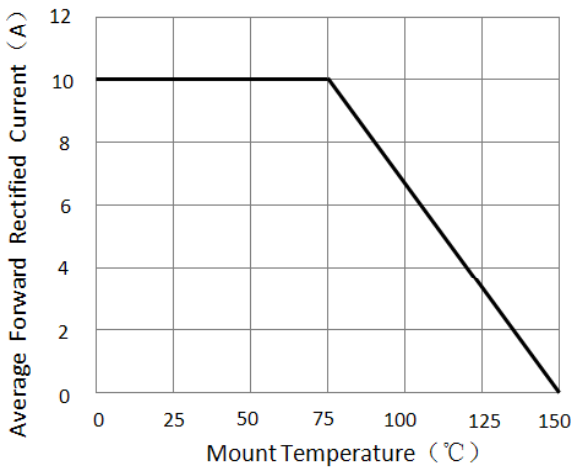
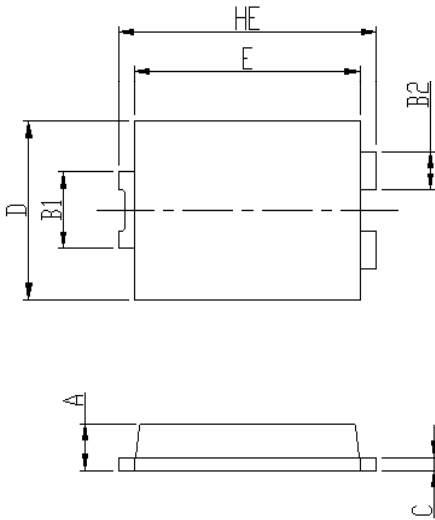
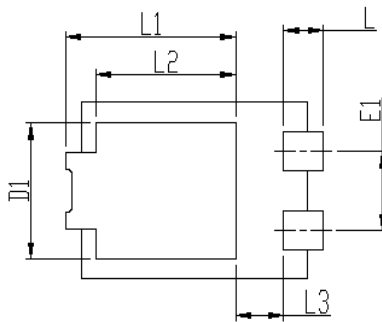


Figure 5. Forward Current Derating Curve

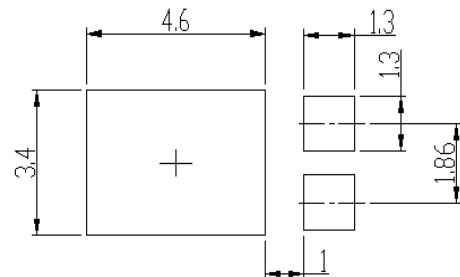
Package Outline Dimensions



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

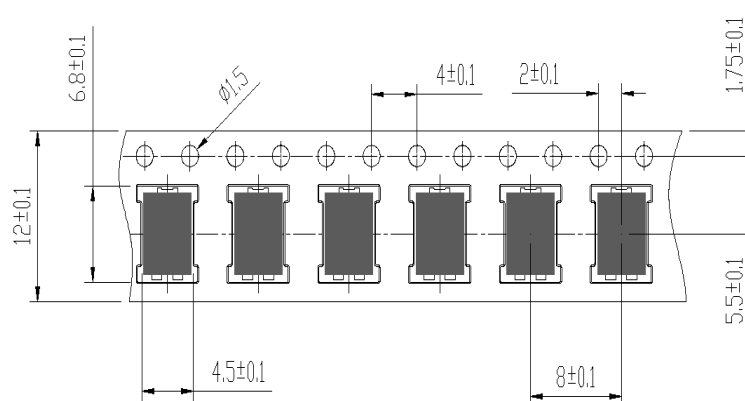


Packing Information

Packing quantities:

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

Tape & Reel Specification





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