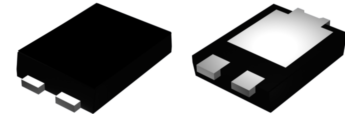
STEIFPOWER
TECHNOLOGY

GGC10CS

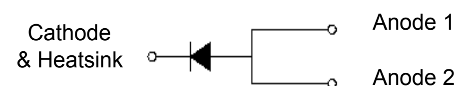
Surface Mount Schottky Rectifier
Reverse Voltage 200V Forward Current 10A

Features

- Heatsink design
- 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
- High temperature soldering guaranteed: 260℃/10 seconds



Package:
eSGC (TO-277)



Schematic Diagram

Applications

- Low voltage high frequency inverters
- DC/DC converters
- Polarity protection applications

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

Parameter	Symbol	Value	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	175	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	MAX.	Unit
Maximum Instantaneous Forward Voltage	I_F=10A	T_A=25℃	V_F	0.85	V
Maximum iIstantaneous Reverse Current	V_R=200V	T_A=25℃	I_R	50	uA
		T_A=125℃		20	mA
Typical Junction Capacitance	4.0 V, 1 MHz		C_J	206	pF
Typical Thermal Resistance	Juntion to Mount		$R_{\theta JM}$ [1]	5	℃/W

Notes:
1)Thermal resistance $R_{\theta JM}$ is junction to mount,mounted on P.C.B with 30*30mm copper pad area

Typical Characteristics Curves

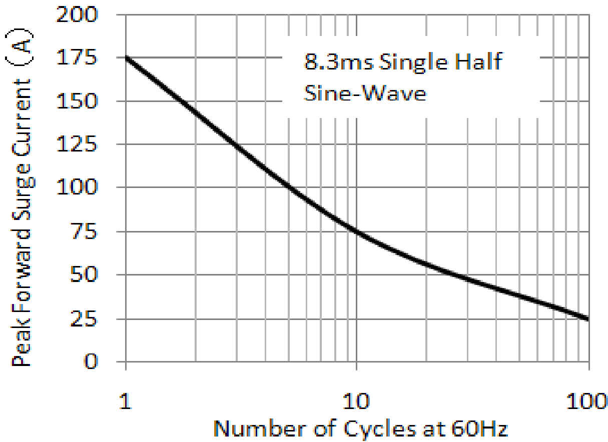


Figure 1.Maximum Non-Repetitive Peak Forward Surge Current

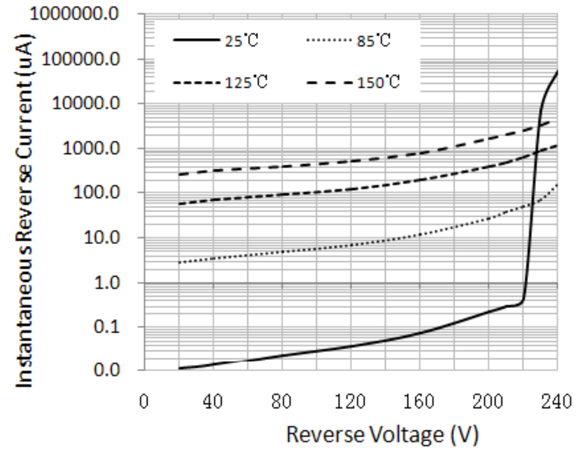


Figure 2. Typical Reverse Characteristics

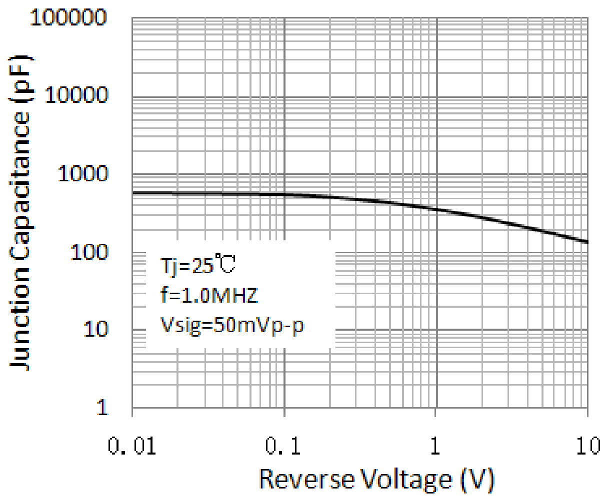


Figure 3. Typical Junction Capacitance

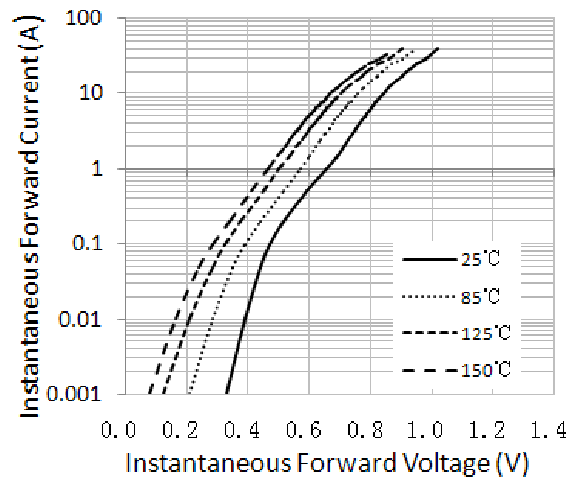


Figure 4. Typical Instantaneous Forward Characteristics

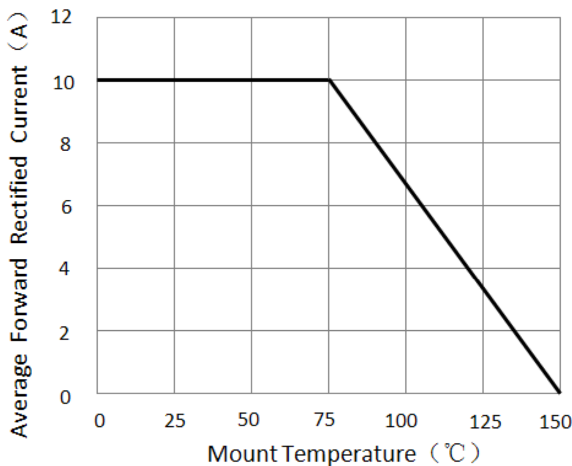
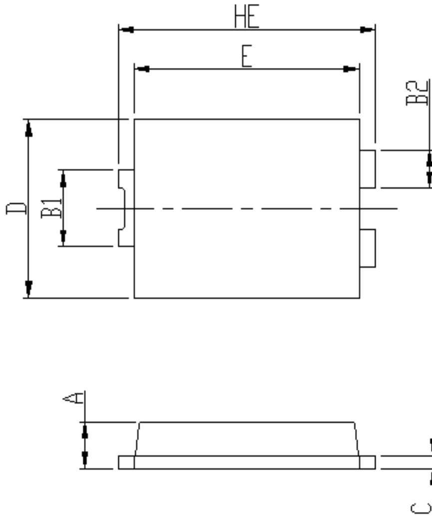
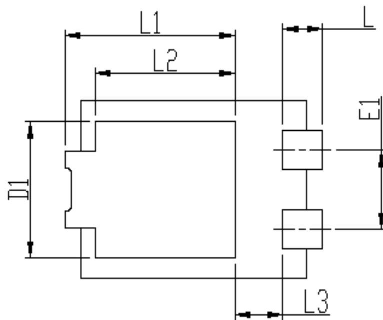


Figure 5.Forward Current Derating Curve

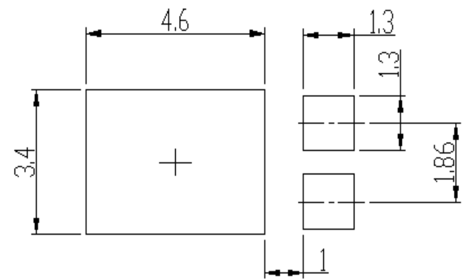
Package Outline Dimensions eSGC (TO-277)



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



Suggested Pad Layout