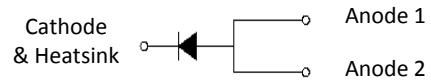
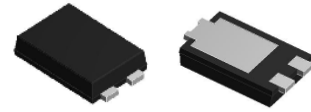


Features

- Glass passivated standard rectifiers
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile



eSGC

TYPICAL APPLICATIONS

For use of general purpose rectification in lighting, cellular phone, portable device, power supplies, and other consumer applications.

MAXIMUM RATINGS (TA = 25 °C unless otherwise noted)									
PARAMETER	SYMBOL	SGC0601 A	SGC0602 A	SGC0603A	SGC0604 A	SGC0605 A	SGC0606 A	SGC0607 A	UNIT
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	IF(AV) ¹⁾	3.0							A
	IF(AV) ²⁾	6.0							
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	180							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	SGC0601A	SGC0602A	SGC0603A	SGC0604A	SGC0605A	SGC0606A	SGC0607A	UNIT
Instantaneous forward voltage	IF=6 A ,TA=25°C	VF	TYP:0.94; MAX:1.1							Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25	IR	10							µA
	TA=125		250							
Typical reverse recovery time	IF=0.5A,IR=1.0A,	trr	4							µS
	Ir=0.25A									
Typical junction capacitance	4.0 V, 1 MHz	CJ	35							pF
Typical thermal resistance	junction to ambient	RθJA ¹⁾	72							°C/W
	junction to mount	RθJM ²⁾	5							°C/W

Notes: 1)Thermal resistance R_{θJA} is junction to ambient. Free air,mounted on P.C.B with recommended copper pad area,2 OZ,FR4

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



SGC0601A thru SGC0607A

Surface Mount Glass Passivated Rectifier
Reverse Voltage 50~1000V Forward Current 6A

RATINGS AND CHARACTERISTICS CURVES

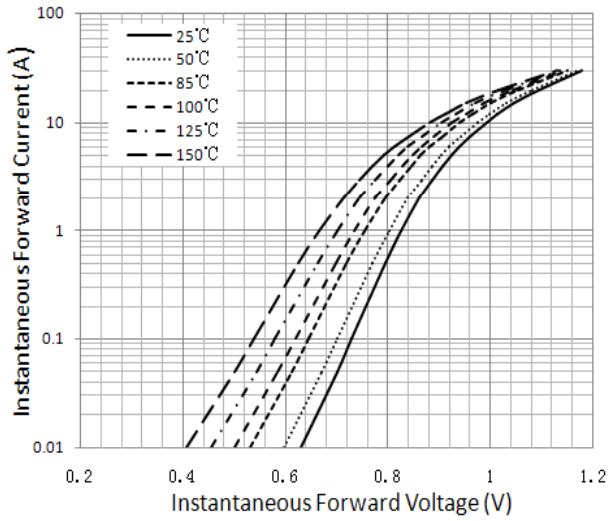


Figure 1. Typical Instantaneous Forward Characteristics

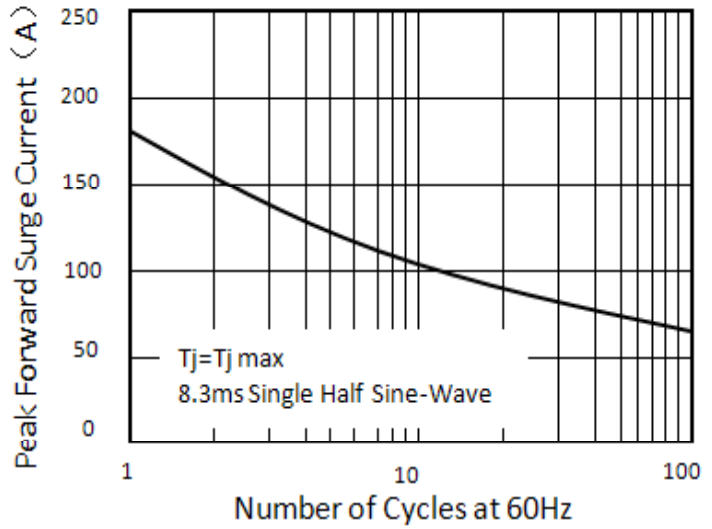


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

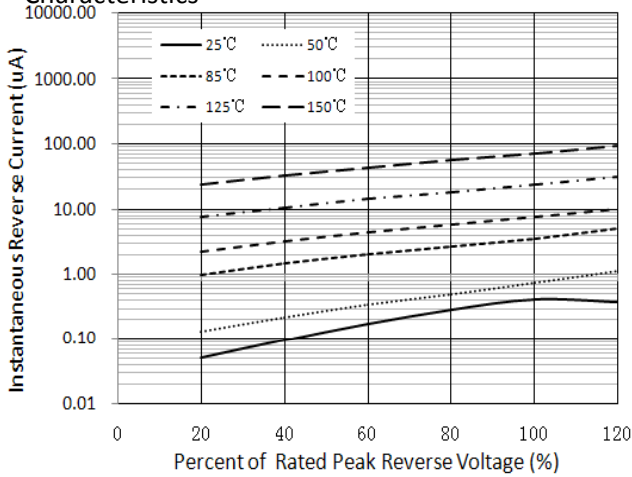


Figure 3. Typical Reverse Characteristics

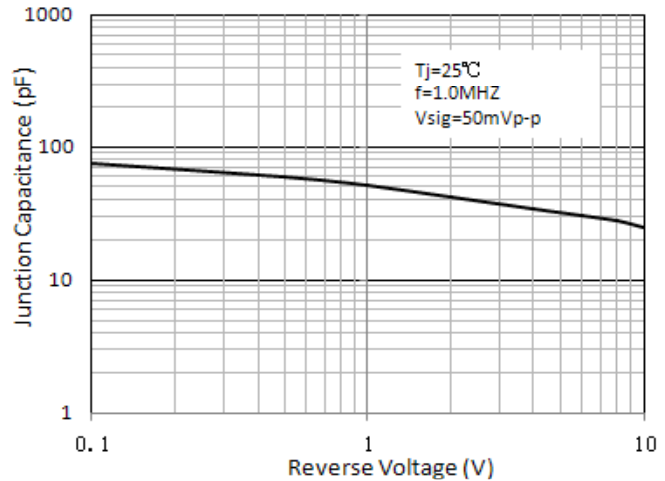


Figure 4. Typical Junction Capacitance

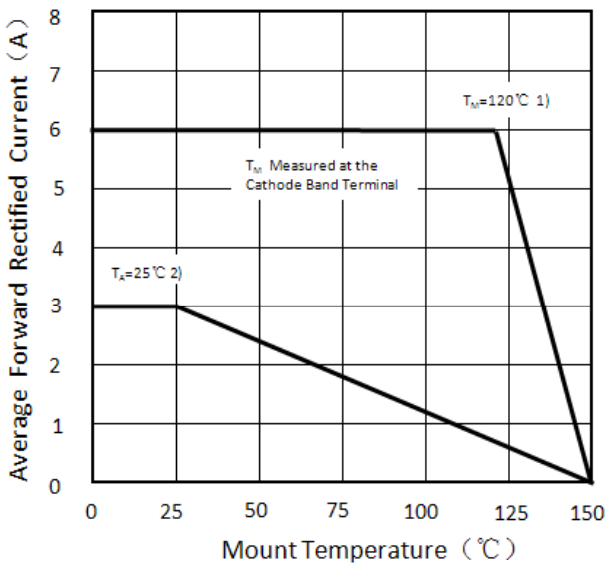


Figure 5. Forward Current Derating Curve

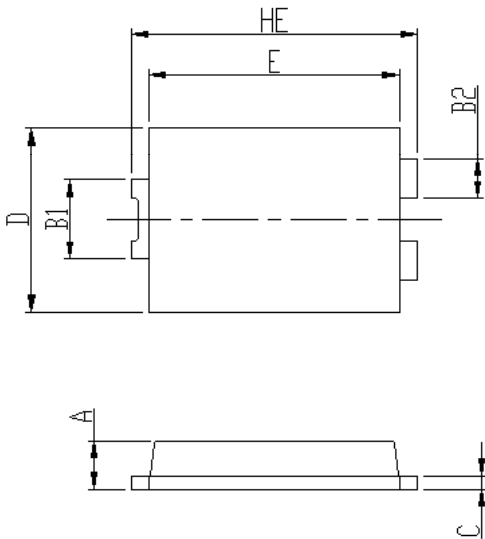
- 1) Mounted on P.C.B with 30*30mm copper pad area
- 2) Fre air, Mounted on recommended copper pad area
FR4 PCB($R_{\theta JA}=72 \text{ } ^\circ\text{C/W}$)



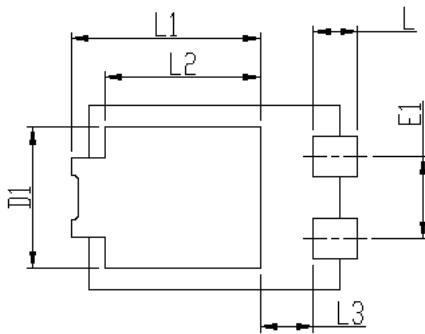
SGC0601A thru SGC0607A

Surface Mount Glass Passivated Rectifier
Reverse Voltage 50~1000V Forward Current 6A

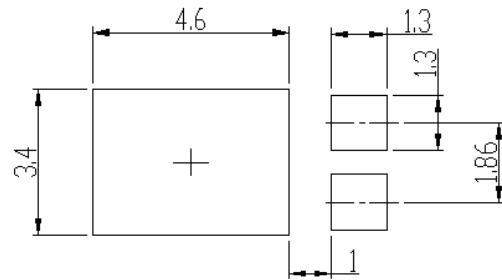
PACKAGE OUTLINE DIMENSIONS (in millimeters)



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

