



SGC61A thru SGC67A/SGC0601A thru SGC0607A

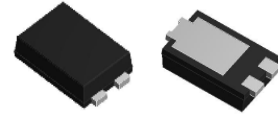
Surface Mount Glass Passivated Rectifier
Reverse Voltage 50~1000V Forward Current 6A

Features

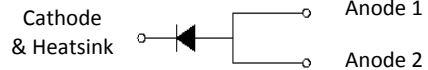
- Glass passivated standard rectifiers
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile - typical height of 1.1 mm



RoHS
COMPLIANT



eSGC (TO-277)



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	SGC61A	SGC62A	SGC63A	SGC64A	SGC65A	SGC66A	SGC67A	Unit
		SGC0601A	SGC0602A	SGC0603A	SGC0604A	SGC0605A	SGC0606A	SGC0607A	
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	SGC61A	SGC62A	SGC63A	SGC64A	SGC65A	SGC66A	SGC67A	Unit
			SGC0601A	SGC0602A	SGC0603A	SGC0604A	SGC0605A	SGC0606A	SGC0607A	
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°C	IR	10							µA
	TA=125°C		250							
Typical reverse recovery time	IF=0.5A,IR=1.0A, trr=0.25A	t _{rr}	4							uS
Typical junction capacitance	4.0 V, 1 MHz	CJ	35							pF
Typical thermal resistance	junction to ambient	R _{θJA} ¹⁾	72							°C/W
	junction to mount	R _{θJM} 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



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Ratings and Characteristics Curves

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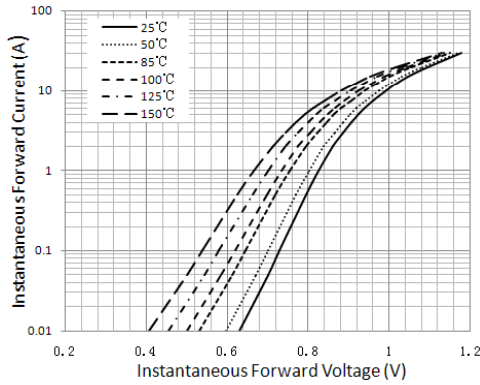


Figure 1. Typical Instantaneous Forward Characteristics

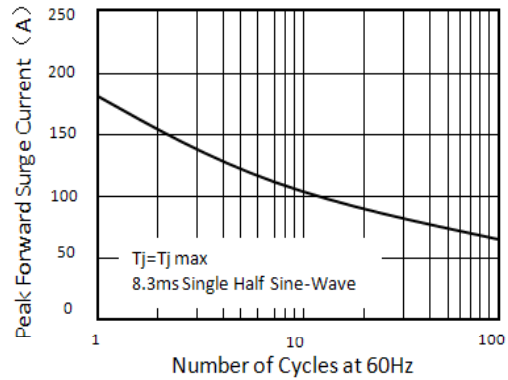


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

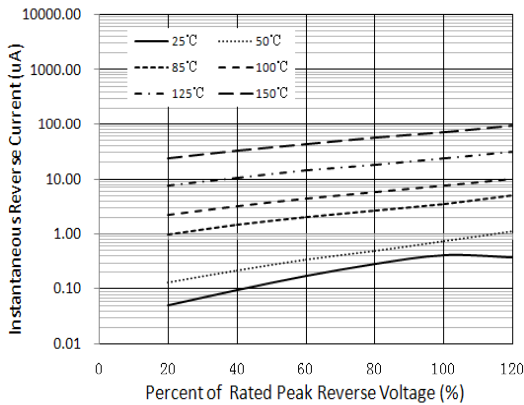


Figure 3. Typical Reverse Characteristics

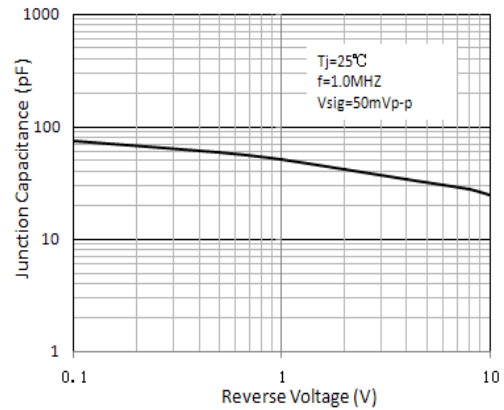


Figure 4. Typical Junction Capacitance

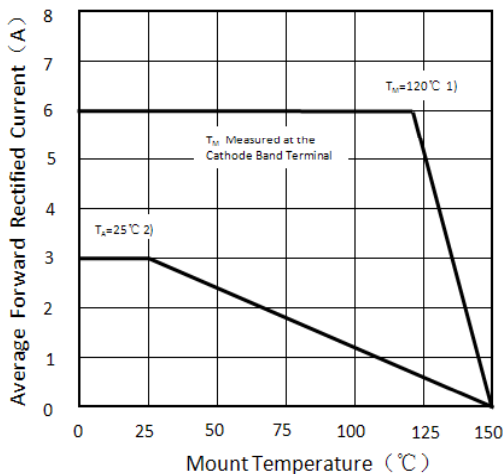


Figure 5. Forward Current Derating Curve

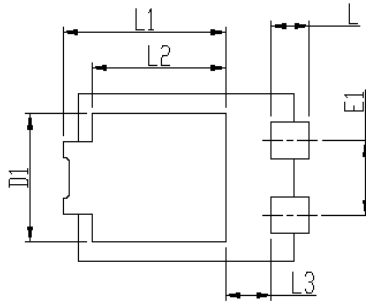
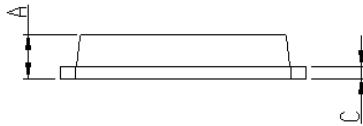
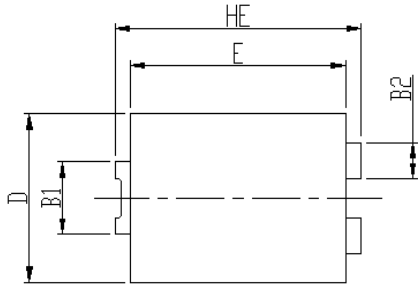
- 1) Mounted on P.C.B with 30*30mm copper pad area
- 2) Fre air, Mounted on recommended copper pad area FR4 PCB ($R_{\theta JA}=72^{\circ}\text{C/W}$)



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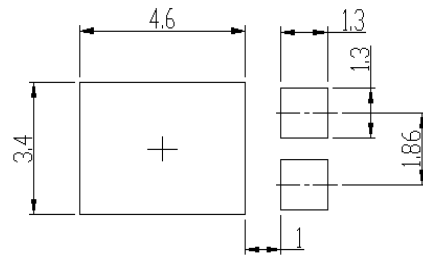
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Package Outline Dimensions



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

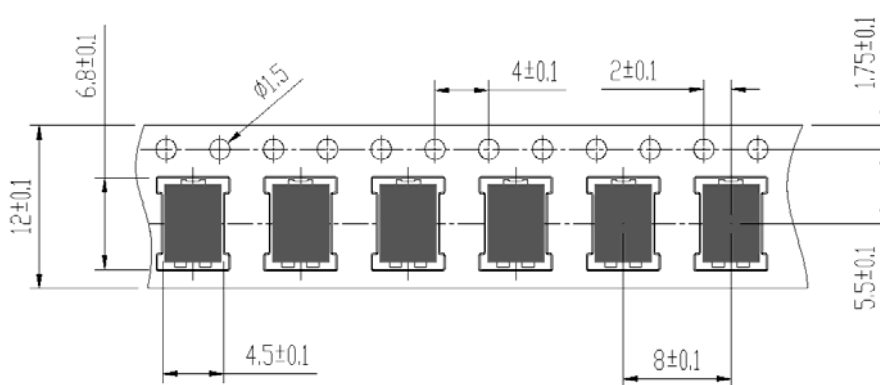


Packing Information

Packing quantities:

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

Tape & Reel Specification





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