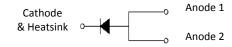
Surface Mount Schottky Rectifier Reverse Voltage 200V Forward Current 10A

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	Α			
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	175	Α			
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	I _F =10A	T _A =25°C	V _F	0.85	Volts			
Maximum instantaneous reverse current	VR=200V	T _A =25°C	I _R	50	uA			
		T _A =125°C		20	mA			
Typical junction capacitance	4.0 V, 1 MHz		CJ	206	pF			
Typical thermal resistance	juntion to mount		R _{eJM} 1)	5	°C/W			

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



Ratings and Characteristics Curves

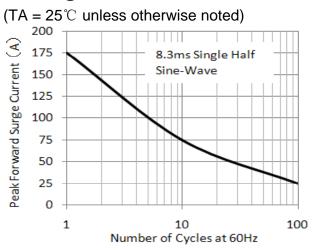


Figure 1.Maximum Non-Repetitive Peak Forward Surge Current

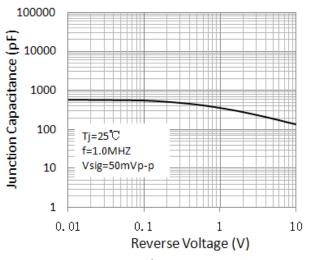


Figure 3. Typical Junction Capacitance

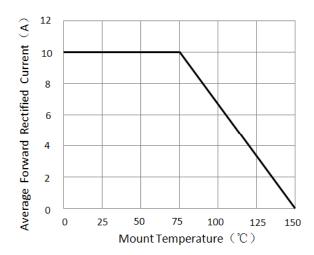


Figure 5.Forward Current Derating Curve

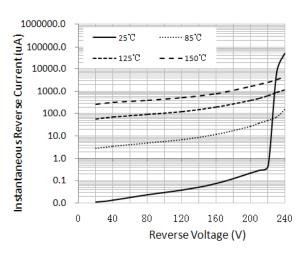


Figure 2. Typical Reverse Characteristics

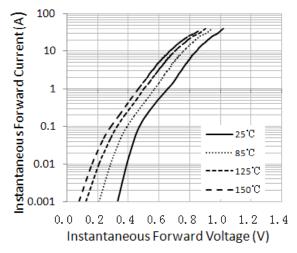
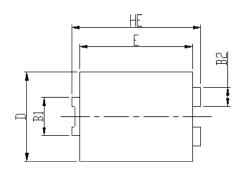


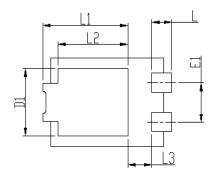
Figure 4. Typical Instantaneous Forward Characteristics

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Package Outline Dimensions

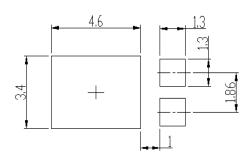






DIM	Unit	: mm	Unit: inch		
	MIN	MAX	MIN	MAX	
HE	6.4	6.6	0.252	0.260	
Е	5.6	5.8	0.220	0.228	
D	4.1	4.3	0.161	0.169	
B1	1.7	1.9	0.067	0.075	
B2	8.0	1	0.031	0.039	
Α	1.05	1.2	0.041	0.047	
С	0.3	0.4	0.012	0.016	
L	0.85	1.1	0.033	0.043	
L1	4.2	4.4	0.165	0.173	
L2	3.52	Тур.	0.139 Typ.		
L3	1.1	1.4	0.043	0.055	
D1	3	3.3	0.118	0.130	
E1	1.86	Тур.	0.073 Typ.		

Soldering footprint

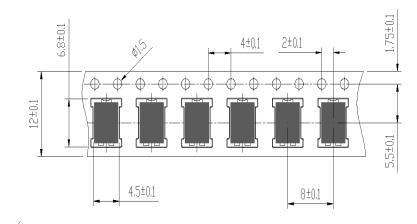


Packing Information

Packing quantities:

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

Tape & Reel Specification



SGC10CS

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