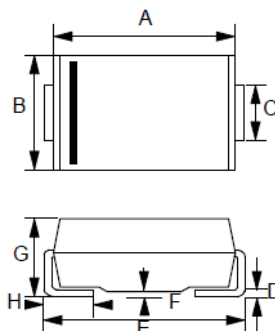


**SURFACE MOUNT  
GLASS PASSIVATED RECTIFIERS**
**REVERSE VOLTAGE –400 to 1000 Volts  
FORWARD CURRENT – 8.0 Amperes**
**FEATURES**

- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

**MECHANICAL DATA**

- Case: Molded plastic
- Case Material molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Polarity: Color band denotes cathode
- Weight : 0.007 ounces, 0.21 grams

**SMC**


SMC		
DIM.	MIN.	MAX
A	6.60	7.11
B	5.59	6.22
C	2.92	3.18
D	0.15	0.31
E	7.75	8.13
F	0.05	0.20
G	2.01	2.50
H	0.76	1.52
All dimension in millimeter		

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

**ABSOLUTE RATINGS**

PARAMETER	SYMBOL	S8GC	S8JC	S8KC	S8MC	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	400	600	800	1000	V
Maximum DC blocking voltage	$V_{DC}$	400	600	800	1000	V
Maximum average forward rectified current @ $T_L=75^\circ\text{C}$	$I_{(AV)}$	8.0				A
Peak forward surge current single half sine-wave superimposed on rated load. (JEDEC METHOD)@ 8.3ms	$I_{FSM}$	200				A
Peak forward surge current single half sine-wave superimposed on rated load. (JEDEC METHOD)@ 1.0ms	$I_{FSM}$	450				A
Typical junction capacitance (Note1)	$C_J$	45				pF
Operation and storage temperature range	$T_J, T_{STG}$	-55 to +150				°C

**STATIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITIONS		SYMBOL	MAX.	UNIT
Forward voltage	$I_F=8.0\text{A}$	$T_J=25^\circ\text{C}$	$V_F$	0.985	V
Leakage current	$V_R$ rated	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	10 250	uA

**THERMAL CHARACTERISTICS**

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note2)	$R_{thJA}$	15	°C/W
Typical thermal resistance	$R_{thJC}$	6	°C/W
	$R_{thJL}$	8	
	$R_{thJA}$	60	

**DYNAMIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITIONS	SYMBOL	TYP.	UNIT
Reverse recovery time	$I_F=0.5\text{A}$ , $I_{rr}=0.25\text{A}$ , $I_R=1.0\text{A}$	$T_{RR}$	2700	ns

**Note :**

- (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- (2) Thermal resistance junction to Ambient. in accordance with JESD-51.  
Unit mounted on 100mm\*100mm\*1.7mm copper pad, heatsink

REV.6, FEB.-2018, KSDC03

# RATING AND CHARACTERISTIC CURVES S8GC thru S8MC

**LITEON**

FIG.1- FORWARD CURRENT DERATING CURVE

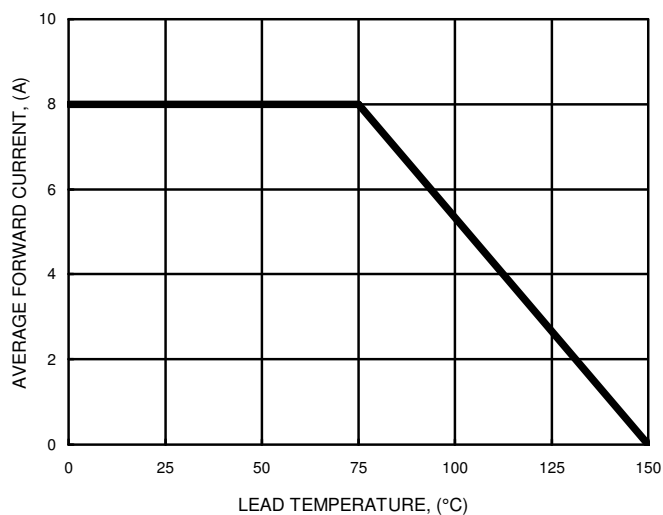


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

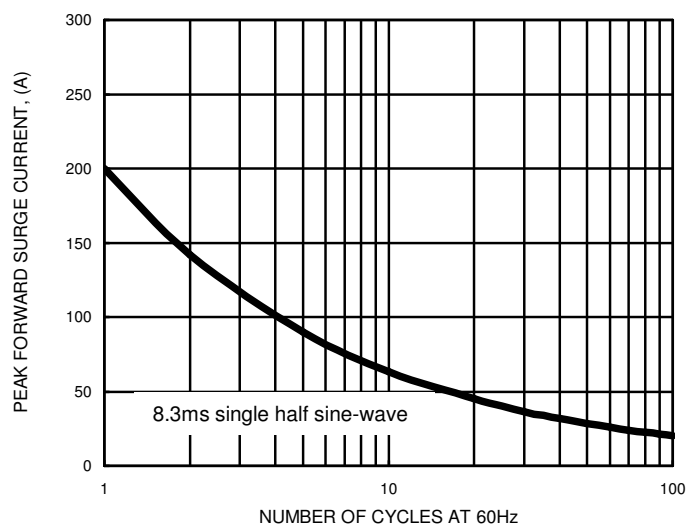


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

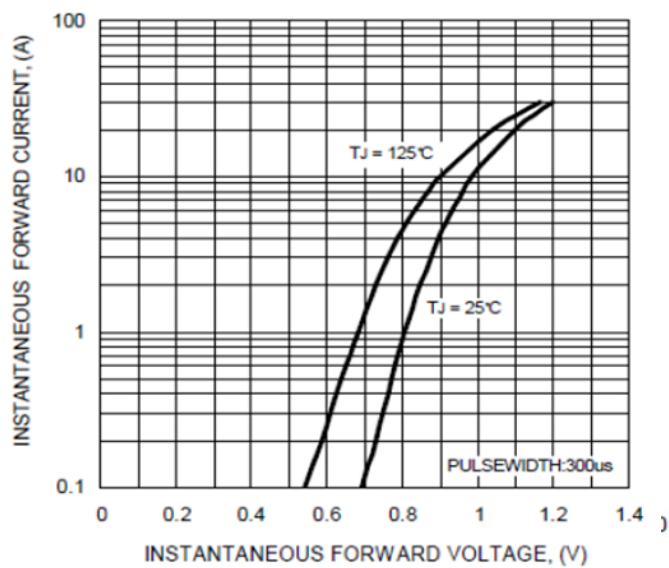
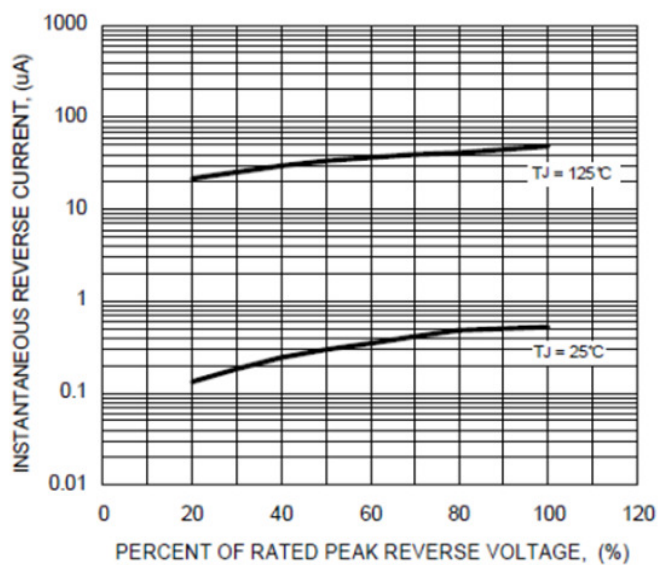


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



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