

- High surge current capability
- Moisture sensitivity: level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



DO-214AB(SMC)

MECHANICAL DATA

Case : DO-214AB(SMC)

Molding compound, UL flammability classification rating 94V-0
 Base P/N with suffix "G" on packing code - halogen-free, RoHS compliant

Terminal : Matte tin plated leads, solderable per JESD22-B102
 Meet JESD 201 class 1A whisker test

Polarity : Indicated by cathode band

Weight : 0.27 gram (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	S8GC	S8JC	S8KC
Maximum repetitive peak reverse voltage	V _{RRM}	400	600	800
Maximum RMS voltage	V _{RMS}	280	420	560
Maximum DC blocking voltage	V _{DC}	400	600	800
Maximum average forward rectified current	I _{F(AV)}	8		
Peak forward surge current 8.3 ms single half sine-wave	T _J =25°C	I _{FSM}	200	
	T _J =125°C		170	
Peak forward surge current 1.0 ms single half sine-wave	T _J =25°C	I _{FSM}	600	
	T _J =125°C		338	
Maximum instantaneous forward voltage (Note 1) I _F = 8 A	V _F	0.985		
Maximum reverse current @ rated VR T _A =25 °C T _A =125 °C	I _R	10		
		250		
Typical Junction Capacitance (Note 2)	C _J	48		
Typical thermal resistance (Note 3)	R _{θJA}	44		
Operating junction temperature range	T _J	- 55 to + 150		
Storage temperature range	T _{STG}	- 55 to + 150		

Note 1 : Pulse test with PW=300u sec, 1% duty cycle

Note 2: Measured at 1.0MHz and applied reverse voltage of 4.0V DC

Note 3: Mount on Cu pad size 16mm x 16mm on PCB

Document Number : 1307006

(Note 1)	M6	SMC	3000 / 13" Plastic reel
----------	----	-----	-------------------------

Note 1: "xx" defines voltage from 400V (S8GC) to 1000V (S8MC)

EXAMPLE

PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
S8MC R7	SS36	R7		
SMC R7G	SS36	R7	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

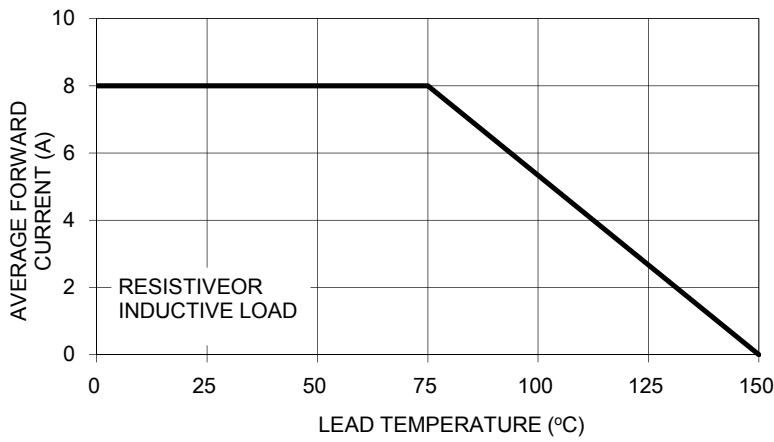


FIG. 2- MAXIMUM NON-REPEATING FORWARD SURGE CURRENT

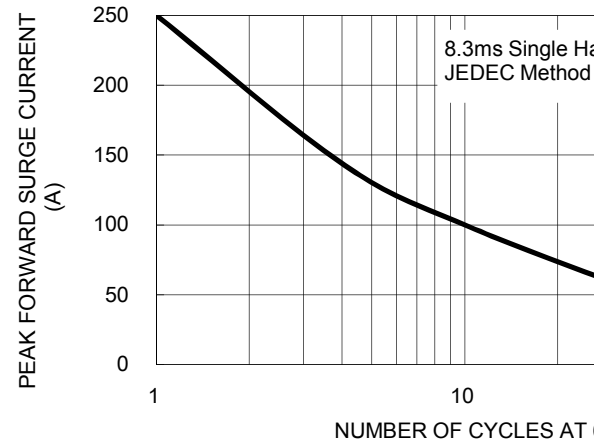


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

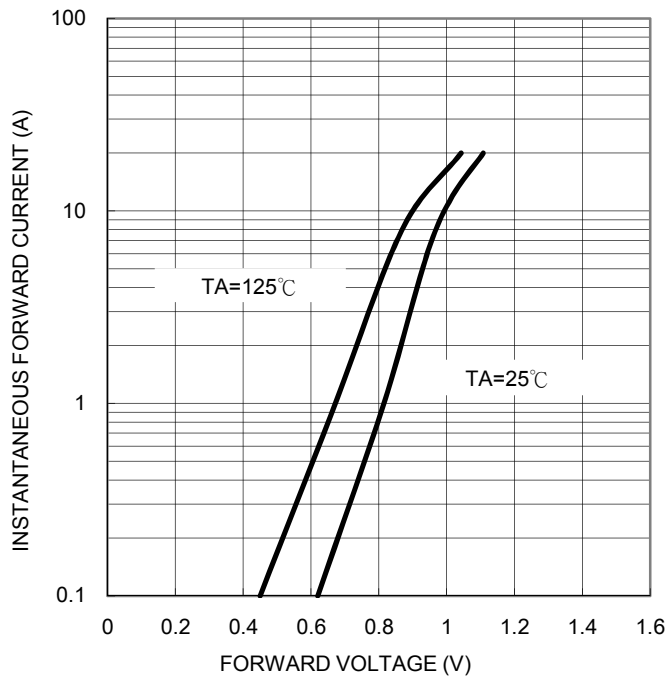
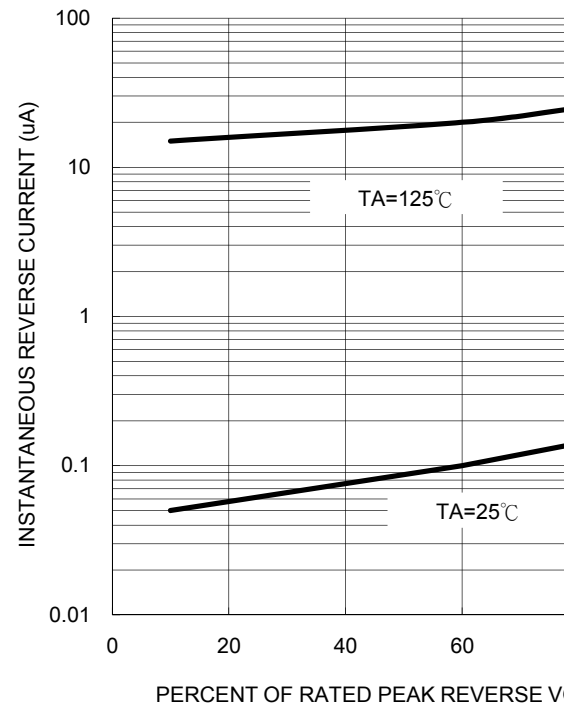
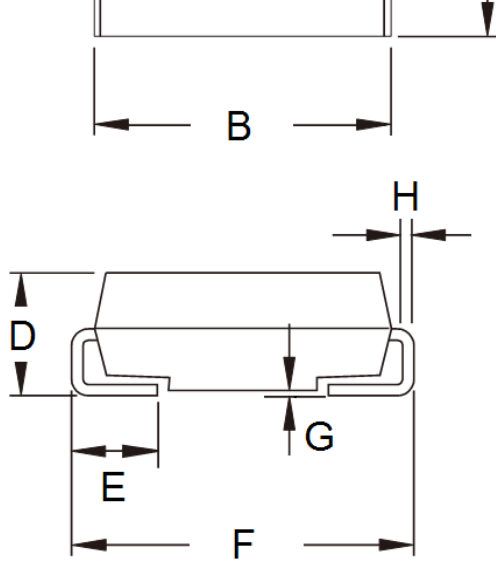


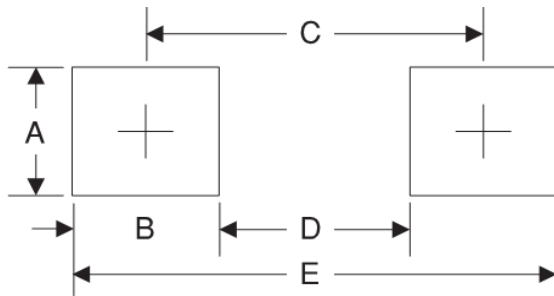
FIG. 4- TYPICAL REVERSE CHARACTERISTICS





B	6.60	7.11	0.260	0.280
C	5.59	6.22	0.220	0.245
D	2.00	2.62	0.079	0.103
E	1.00	1.60	0.039	0.063
F	7.75	8.13	0.305	0.320
G	0.10	0.20	0.004	0.008
H	0.15	0.31	0.006	0.012

SUGGESTED PAD LAYOUT



Symbol	Unit(mm)
A	3.3
B	2.5
C	6.8
D	4.4
E	9.4

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YW = Date Code
- F = Factory Code