

- High surge current capability
- 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

Moisture sensitivity: level 1, per J-STD-020

Packing code with suffix "G" means green compound (halogen-free)

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

Polarity: Indicated by cathode band

Weight: 0.27 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ 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	$T_J = 25^{\circ}C$	I_{FSM}	200		
	$T_J = 125^{\circ}C$		170		
Peak forward surge current 1.0 ms single half sine-wave	$T_J = 25^{\circ}C$	I_{FSM}	600		
	$T_J = 125^{\circ}C$		338		
Maximum instantaneous forward voltage (Note 1) IF= 8 A		V_F	0.985		
Maximum reverse current @ rated VR $T_J=25^{\circ}C$ 					

Note 1: Pulse test with $PW=300\mu\text{s}$, 1% duty cycle

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

Document Number: DS_D0000010

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

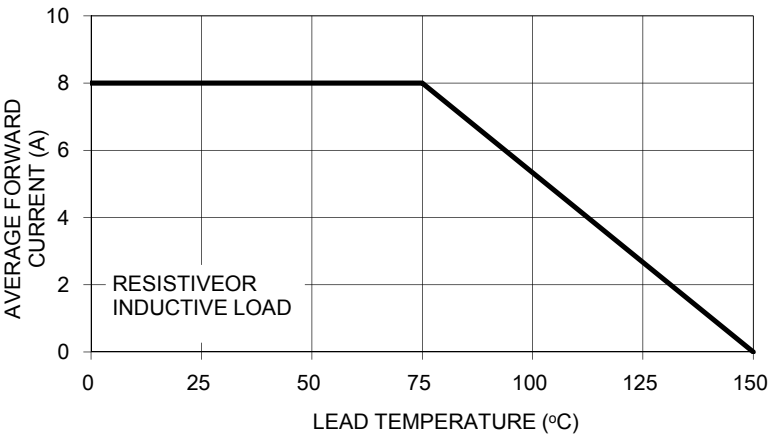


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

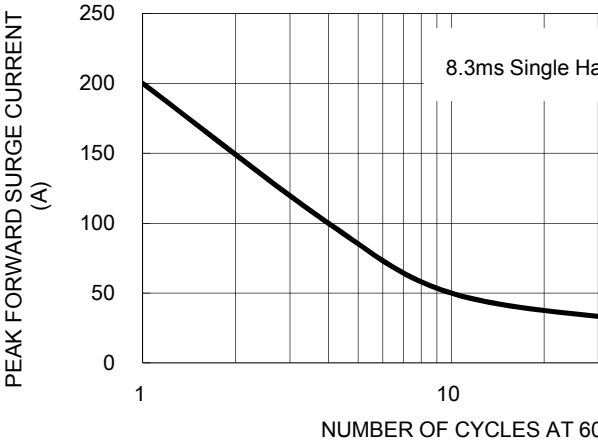


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

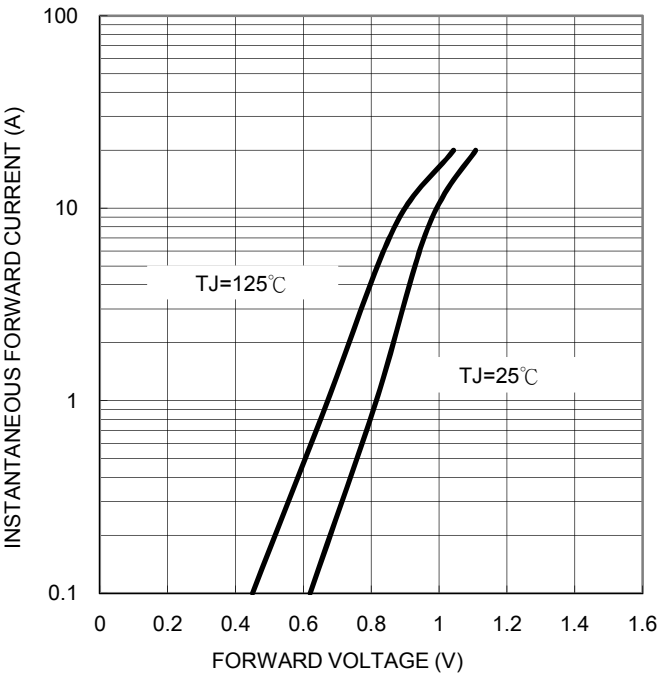
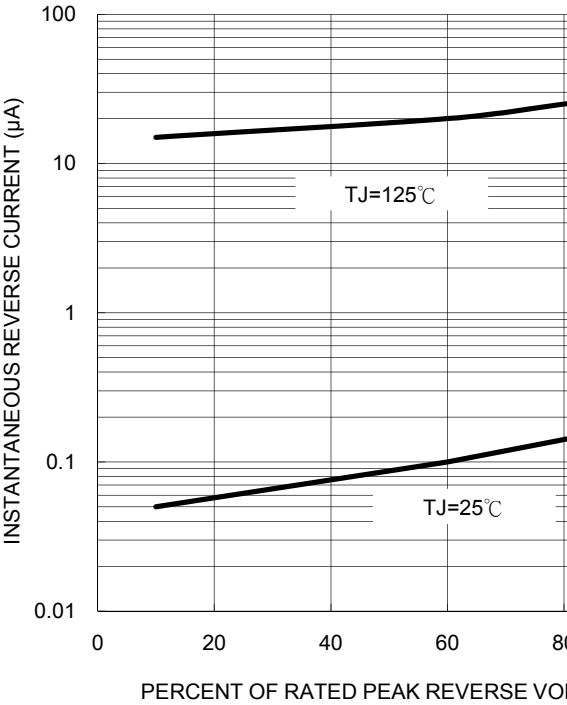
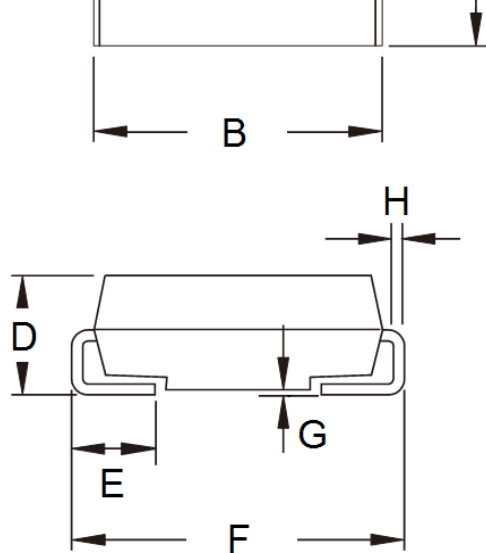


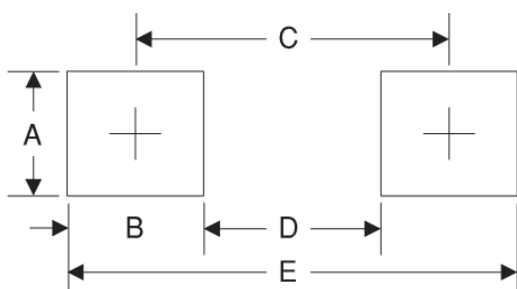
FIG. 4- TYPICAL REVERSE CHARACTERISTICS





A	2.00	0.20	0.111	0.120
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)	Unit (inch)
A	3.3	0.130
B	2.5	0.098
C	6.8	0.268
D	4.4	0.173
E	9.4	0.370

MARKING DIAGRAM



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

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, of any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to indemnify TSC for any damages resulting from such improper use or sale.

Document Number: DS_D0000010