

THERMAL PERFORMANCE				
PARAMETER	SYMBOL	TYP	UNIT	
Junction-to-ambient thermal resistance	$R_{\Theta JA}$	20	°C/W	

ELECTRICAL SPECIFICATIONS (T _A = 25°C unless otherwise noted)						
PARAMETER		CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage ⁽¹⁾	SK82C SK83C SK84C	I _F = 8A, T _J = 25°C	V _F	-	0.55	V
	SK85C SK86C			-	0.75	V
	SK810C			-	0.90	V
Reverse current @ rated V _R ⁽²⁾		T _J = 25°C	I _R	-	0.5	mA
Reverse current @ rated V _R ⁽²⁾	SK82C SK83C SK84C	T _J = 100°C	I _R	-	15	mA
	SK85C SK86C SK810C			-	10	mA

Notes:

- 1. Pulse test with PW = 0.3ms
- 2. Pulse test with PW = 30ms

ORDERING INFORMATION			
ORDERING CODE ⁽¹⁾	PACKAGE	PACKING	
SK8xC	DO-214AB (SMC)	3,000 / Tape & Reel	

Notes:

1. "x" defines voltage from 20V(SK82C) to 100V(SK810C)



CHARACTERISTICS CURVES

 $(T_A = 25^{\circ}C \text{ unless otherwise noted})$

Fig.1 Forward Current Derating Curve

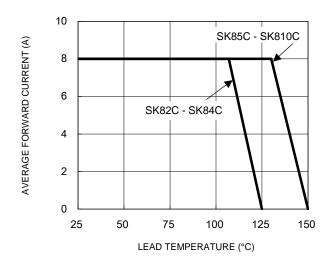


Fig.2 Typical Junction Capacitance

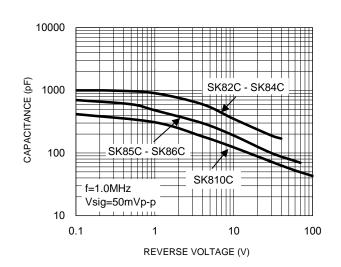
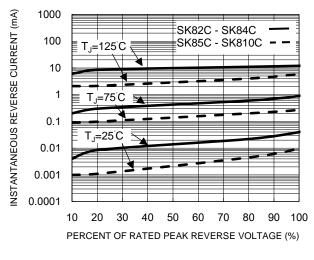


Fig.3 Typical Reverse Characteristics





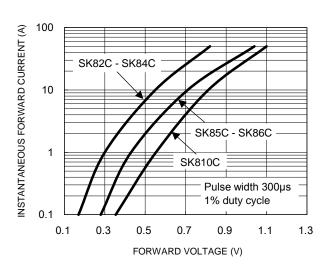
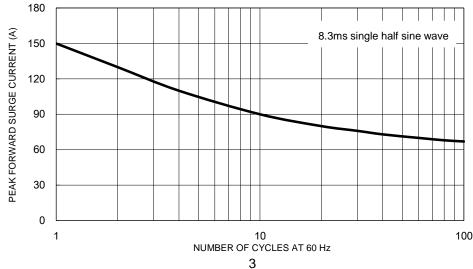


Fig.5 Maximum Non-Repetitive Forward Surge Current

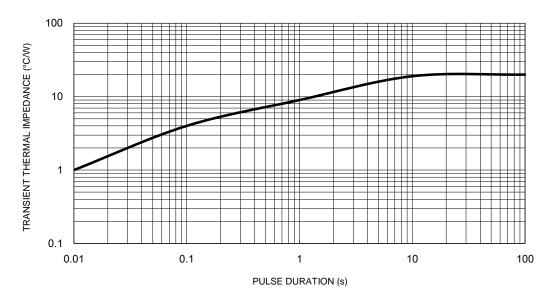




CHARACTERISTICS CURVES

 $(T_A = 25^{\circ}C \text{ unless otherwise noted})$

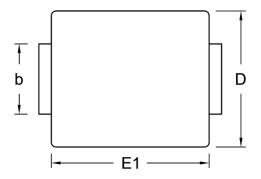
Fig.6 Typical Transient Thermal Characteristics

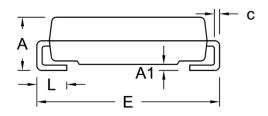




PACKAGE OUTLINE DIMENSIONS

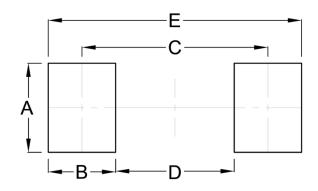
DO-214AB (SMC)





DIM.	Unit (mm)		Unit ((inch)
Dilvi.	Min.	Max.	Min.	Max.
Α	2.00	2.62	0.079	0.103
A1	0.10	0.20	0.004	0.008
b	2.90	3.20	0.114	0.126
С	0.15	0.31	0.006	0.012
D	5.59	6.22	0.220	0.245
E	7.75	8.13	0.305	0.320
E1	6.60	7.11	0.260	0.280
L	1.00	1.60	0.039	0.063

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
Α	3.30	0.130
В	2.50	0.098
С	6.90	0.272
D	4.40	0.173
E	9.40	0.370

MARKING DIAGRAM



P/N = Marking Code G = Green Compound

ΥW = Date Code F = Factory Code



Taiwan Semiconductor

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.

Purchasers are solely responsible for the choice, selection, and use of TSC products and TSC assumes no liability for application assistance or the design of Purchasers' products.

Information contained herein is intended to provide a product description only. No license, express or implied, to 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 fully indemnify TSC for any damages resulting from such improper use or sale.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Taiwan Semiconductor:

SK83C SK84C SK86C SK810C