

<b>THERMAL PERFORMANCE</b>			
PARAMETER	SYMBOL	TYP	UNIT
Junction-to-lead thermal resistance	$R_{\theta JL}$	17	°C/W
Junction-to-ambient thermal resistance	$R_{\theta JA}$	50	°C/W

<b>ELECTRICAL SPECIFICATIONS</b> ( $T_A = 25^\circ\text{C}$ unless otherwise noted)						
PARAMETER		CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage <sup>(1)</sup>	SK52C SK53C SK54C	$I_F = 5\text{A}, T_J = 25^\circ\text{C}$	$V_F$	-	0.55	V
	SK55C SK56C			-	0.75	V
	SK59C SK510C			-	0.85	V
	SK515C SK520C			-	0.95	V
Reverse current @ rated $V_R$ <sup>(2)</sup>	SK52C SK53C SK54C SK55C SK56C	$T_J = 25^\circ\text{C}$	$I_R$	-	0.5	mA
	SK59C SK510C SK515C SK520C			-	0.3	mA
Reverse current @ rated $V_R$ <sup>(2)</sup>	SK52C SK53C SK54C	$T_J = 100^\circ\text{C}$	$I_R$	-	20	mA
	SK55C SK56C			-	10	mA
	SK59C SK510C SK515C SK520C			-	-	mA
Reverse current @ rated $V_R$ <sup>(2)</sup>	SK52C SK53C SK54C	$T_J = 125^\circ\text{C}$	$I_R$	-	-	mA
	SK55C SK56C			-	-	mA
	SK59C SK510C SK515C SK520C			-	5	mA

**Notes:**

- Pulse test with  $PW = 0.3\text{ms}$
- Pulse test with  $PW = 30\text{ms}$

<b>ORDERING INFORMATION</b>		
ORDERING CODE <sup>(1)</sup>	PACKAGE	PACKING
SK5xC	DO-214AB (SMC)	3,000 / Tape & Reel

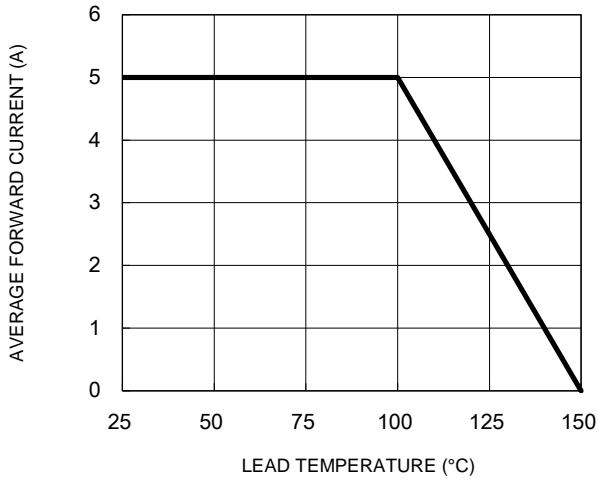
**Notes:**

- "x" defines voltage from 20V(SK52C) to 200V(SK520C)

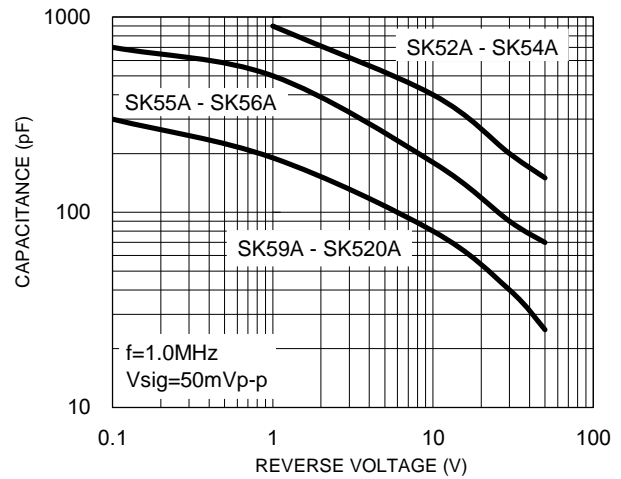
## CHARACTERISTICS CURVES

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

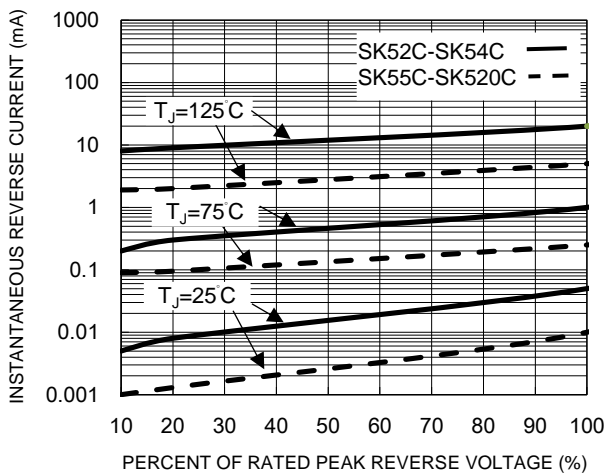
**Fig.1 Forward Current Derating Curve**



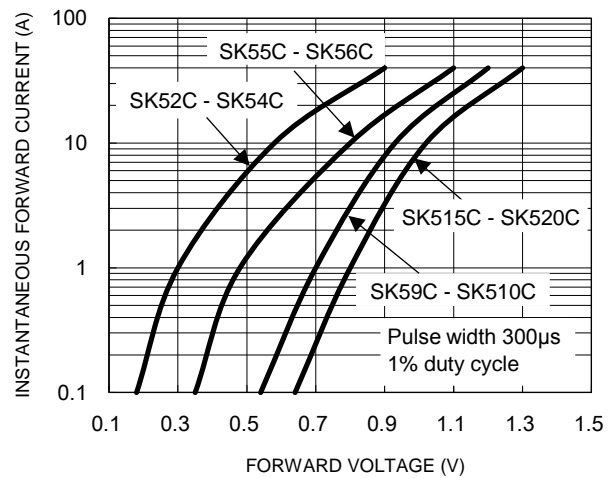
**Fig.2 Typical Junction Capacitance**



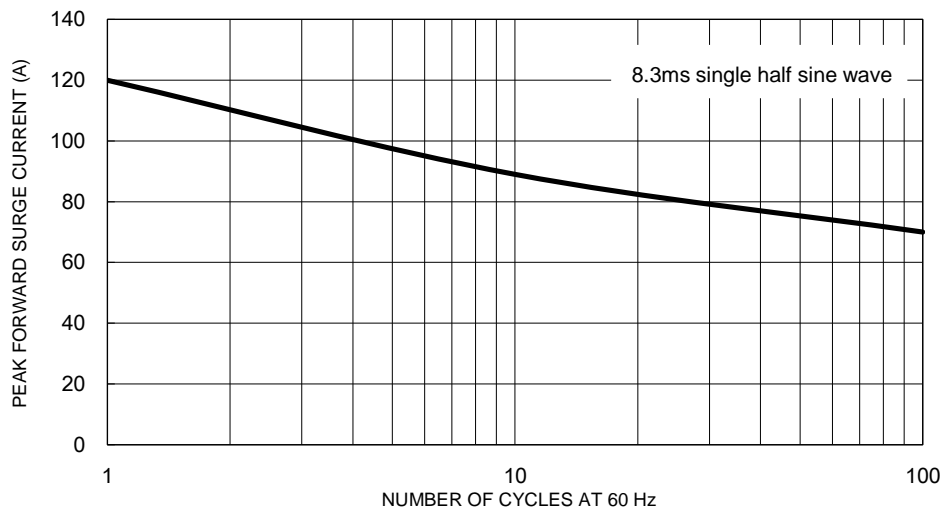
**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



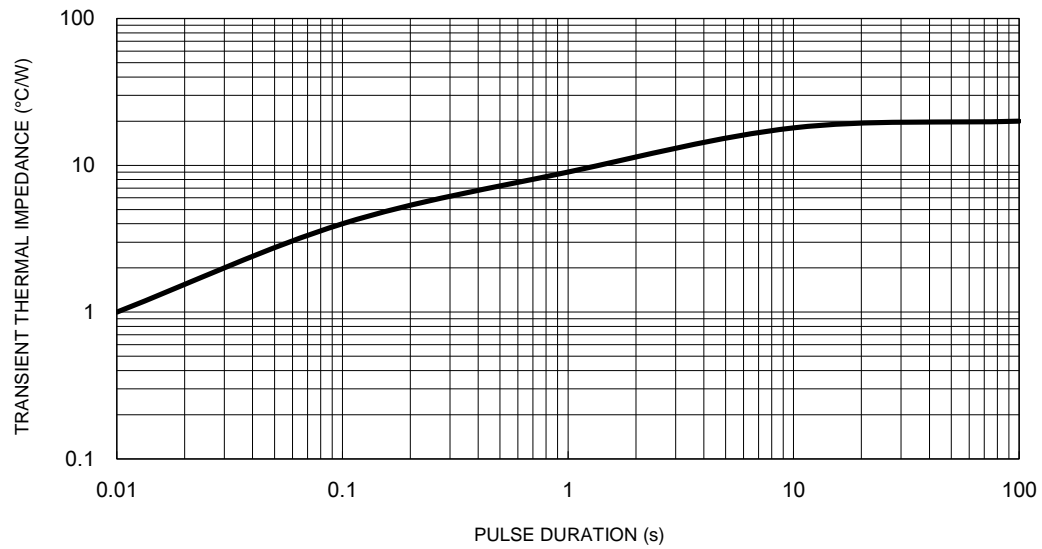
**Fig.5 Maximum Non-Repetitive Forward Surge Current**



## CHARACTERISTICS CURVES

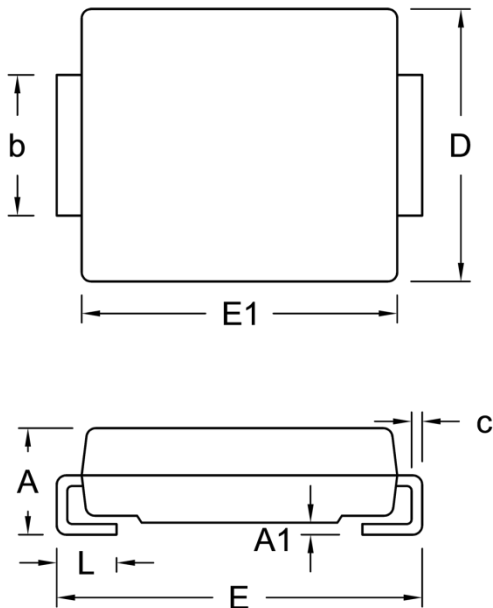
( $T_A = 25^\circ\text{C}$  unless otherwise noted)

**Fig.6 Typical Transient Thermal Characteristics**



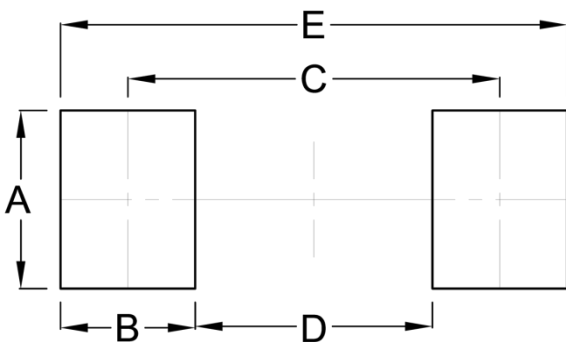
## PACKAGE OUTLINE DIMENSIONS

DO-214AB (SMC)



DIM.	Unit (mm)		Unit (inch)	
	Min.	Max.	Min.	Max.
A	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
c	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)
A	3.30	0.130
B	2.50	0.098
C	6.90	0.272
D	4.40	0.173
E	9.40	0.370

## MARKING DIAGRAM



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

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