

Taiwan Semiconductor

THERMAL PERFORMANCE			
PARAMETER	SYMBOL	TYP	UNIT
Junction-to-lead thermal resistance	$R_{\Theta JL}$	20	°C/W
Junction-to-ambient thermal resistance	$R_{\Theta JA}$	70	°C/W

ELECTRICAL SPECIFICATIONS (T _A = 25°C unless otherwise noted)					
PARAMETER	CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage ⁽¹⁾	I _F = 1.0A, T _J = 25°C		-	1.5	V
	I _F = 1.5A, T _J = 25°C	V_{F}	-	1.6	V
Reverse current @ rated V _R ⁽²⁾	T _J = 25°C	I _R	-	1	μΑ
	T _J = 100°C		-	10	μΑ
	T _J = 125°C		-	50	μΑ
Junction capacitance	1MHz, V _R = 4.0V	CJ	13	-	pF
Reverse recovery time	$I_F = 0.5A, I_R = 1.0A,$ $I_{rr} = 0.25A$	t _{rr}	-	120	ns

Notes:

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

ORDERING INFORMATION			
ORDERING CODE	PACKAGE	PACKING	
BYG21M	DO-214AC (SMA)	7,500 / Tape & Reel	



CHARACTERISTICS CURVES

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

Fig.1 Forward Current Derating Curve

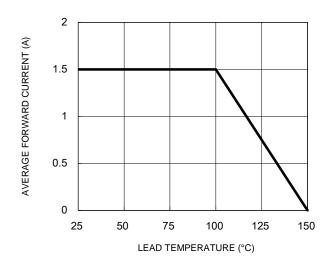


Fig.3 Typical Reverse Characteristics

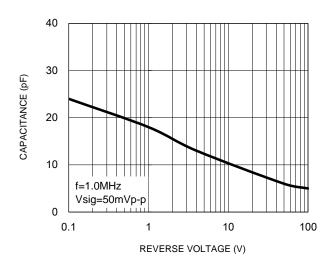
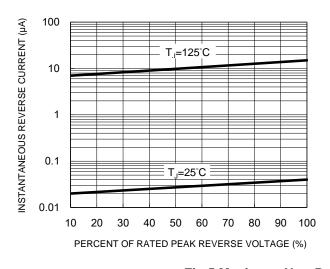


Fig.2 Typical Junction Capacitance

Fig.4 Typical Forward Characteristics



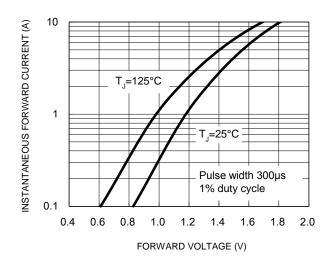
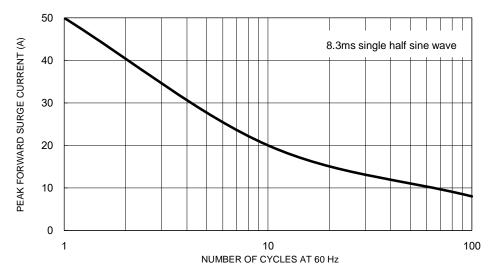


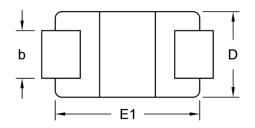
Fig.5 Maximum Non-Repetitive Forward Surge Current

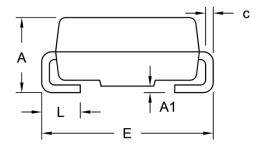




PACKAGE OUTLINE DIMENSIONS

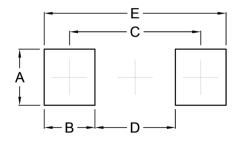
DO-214AC (SMA)





DIM.	Unit (mm)		Unit (inch)	
DIWI.	Min.	Max.	Min.	Max.
Α	1.99	2.50	0.078	0.098
A1	0.10	0.20	0.004	0.008
b	1.27	1.58	0.050	0.062
С	0.15	0.31	0.006	0.012
D	2.29	2.83	0.090	0.111
E	4.95	5.33	0.195	0.210
E1	4.06	4.60	0.160	0.181
L	0.90	1.41	0.035	0.056

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
Α	1.68	0.066
В	1.52	0.060
С	3.93	0.155
D	2.41	0.095
E	5.45	0.215

MARKING DIAGRAM



P/N = Marking Code G = Green Compound

YW = Date Code F = Factory Code



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