

Taiwan Semiconductor

THERMAL PERFORMANCE				
PARAMETER	SYMBOL	ТҮР	UNIT	
Junction-to-ambient thermal resistance	$R_{\Theta J A}$	55	°C/W	
Junction-to-lead thermal resistance	$R_{\Theta JL}$	18	°C/W	

ELECTRICAL SPECIFICATIONS (TA = 25°C unless otherwise noted)						
PARAMETER		CONDITIONS	SYMBOL	ТҮР	MAX	UNIT
Forward voltage <sup>(1)</sup>		$I_F = 2A, T_J = 25^{\circ}C$	V <sub>F</sub>	-	1.3	V
Reverse current @ rated V <sub>R</sub> <sup>(2)</sup>		T <sub>J</sub> = 25°C	- I <sub>R</sub>	-	5	μA
		T <sub>J</sub> = 125°C		-	50	μA
Junction capacitance		$1MHz, V_R = 4.0V$	CJ	50	-	pF
Reverse recovery time	RS2A	I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A I <sub>rr</sub> = 0.25A	t <sub>rr</sub>	-	150	ns
	RS2B					
	RS2D					
	RS2G					
	RS2J			-	250	ns
	RS2K				500	ne
	RS2M			-	500	ns

#### Notes:

1. Pulse test with PW = 0.3ms

2. Pulse test with PW = 30ms

ORDERING INFORMATION			
ORDERING CODE <sup>(1)</sup>	PACKAGE	PACKING	
RS2x	DO-214AA (SMB)	3,000 / Tape & Reel	

Notes:

1. "x" defines voltage from 50V(RS2A) to 1000V(RS2M)



100

10

1

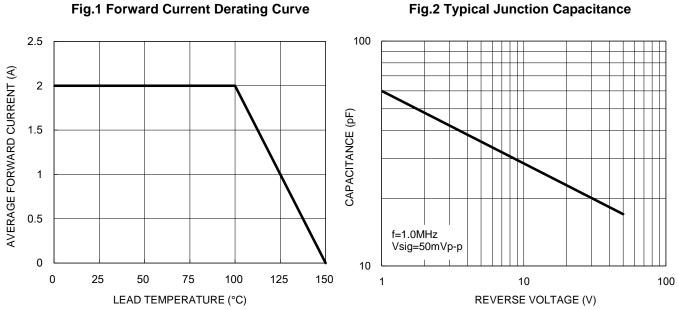
0.1

20

INSTANTANEOUS REVERSE CURRENT (µA)

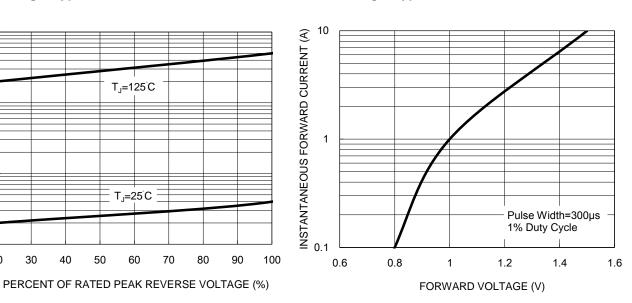
### **CHARACTERISTICS CURVES**

(T<sub>A</sub> = 25°C unless otherwise noted)



**Fig.3 Typical Reverse Characteristics** 

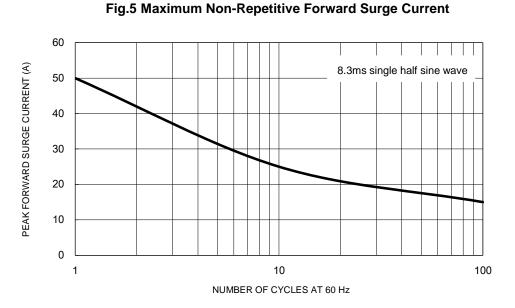
**Fig.4 Typical Forward Characteristics** 



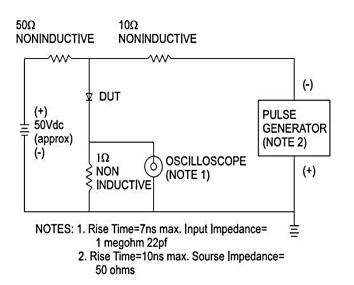


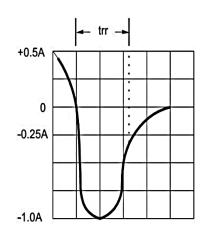
### **CHARACTERISTICS CURVES**

(T<sub>A</sub> = 25°C unless otherwise noted)



#### Fig.6 Reverse Recovery Time Characteristic and Test Circuit Diagram

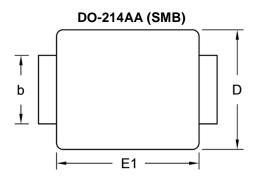


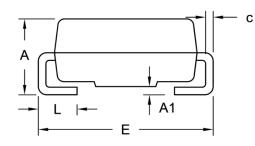


Taiwan Semiconductor



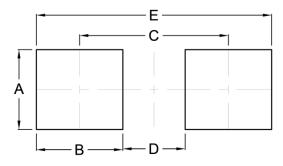
# PACKAGE OUTLINE DIMENSIONS





DIM.	Unit (mm)		Unit	(inch)
	Min.	Max.	Min.	Max.
A	1.95	2.65	0.077	0.104
A1	0.05	0.20	0.002	0.008
b	1.95	2.20	0.077	0.087
с	0.15	0.31	0.006	0.012
D	3.30	3.95	0.130	0.156
E	5.10	5.60	0.201	0.220
E1	4.05	4.60	0.159	0.181
L	0.75	1.60	0.030	0.063

# SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
A	2.30	0.091
В	2.50	0.098
С	4.30	0.169
D	1.80	0.071
E	6.80	0.268

# **MARKING DIAGRAM**



P/N	= Marking Code
-----	----------------

G = Green Compound

YW = 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:RS2BRS2DRS2GRS2JRS2KRS2M