

# Taiwan Semiconductor

THERMAL PERFORMANCE				
PARAMETER	SYMBOL	TYP	UNIT	
Junction-to-lead thermal resistance	$R_{\Theta JL}$	25	°C/W	
Junction-to-ambient thermal resistance	R <sub>OJA</sub>	80	°C/W	

ELECTRICAL SPECIFICATIONS (T <sub>A</sub> = 25°C unless otherwise noted)					
PARAMETER	CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage per diode <sup>(1)</sup>	I <sub>F</sub> = 0.5A, T <sub>J</sub> = 25°C	V <sub>F</sub>	0.88	-	V
	I <sub>F</sub> = 1.5A, T <sub>J</sub> = 25°C		0.97	1.00	V
Reverse current @ rated V <sub>R</sub> per diode <sup>(2)</sup>	T <sub>J</sub> = 25°C	I <sub>R</sub>	-	5	μΑ
Reverse current & rated v <sub>R</sub> per diode	T <sub>J</sub> = 125°C		-	150	μΑ

### Notes:

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

ORDERING INFORMATION			
ORDERING CODE <sup>(1)(2)</sup>	PACKAGE	PACKING	
ABS15x	ABS	5,000 / Tape & Reel	
ABS15xH	ABS	5,000 / Tape & Reel	

### Notes:

- 1. "x" defines voltage from 600V(ABS15J) to 1000V(ABS15M)
- 2. "H" means AEC-Q101 qualified



### **CHARACTERISTICS CURVES**

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

Fig.1 Forward Current Derating Curve

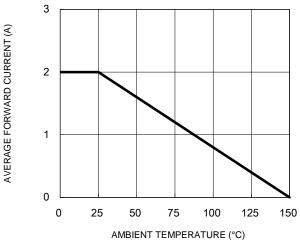


Fig.3 Typical Reverse Characteristics

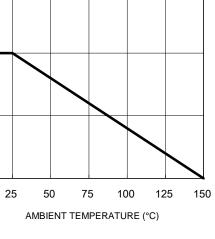


Fig.2 Typical Junction Capacitance

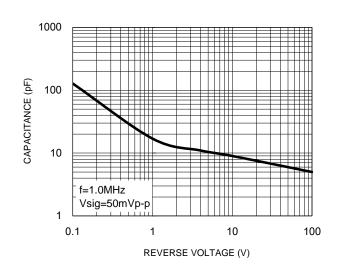
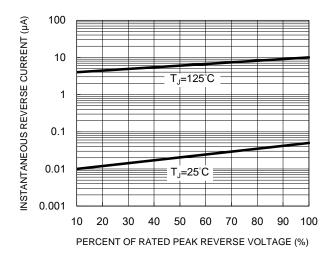


Fig.4 Typical Forward Characteristics



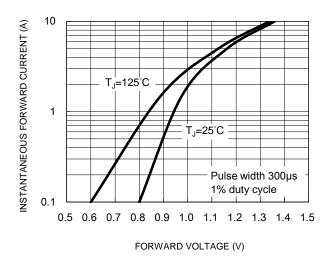
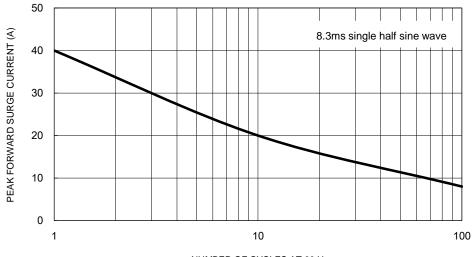


Fig.5 Maximum Non-Repetitive Forward Surge Current

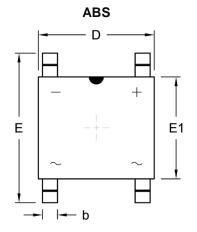


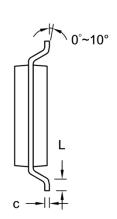
NUMBER OF CYCLES AT 60 Hz 3

Version: E2103



## **PACKAGE OUTLINE DIMENSIONS**

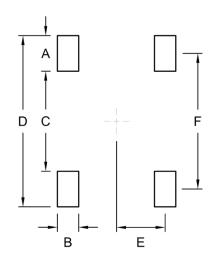




<u> </u>	
A	A2
A1 e	1

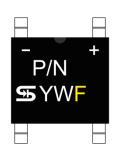
DIM.	Unit (mm)		Unit (	(inch)	
DIIVI.	Min.	Max.	Min.	Max.	
Α	1.40	1.60	0.055	0.063	
A1	0.05	0.15	0.002	0.006	
A2	1.35	1.45	0.053	0.057	
b	0.60	0.70	0.024	0.028	
С	0.15	0.25	0.006	0.010	
D	4.90	5.10	0.193	0.201	
E	6.25	6.65	0.246	0.262	
E1	4.30	4.50	0.169	0.177	
е	3.90	4.10	0.154	0.161	
L	0.30	0.70	0.012	0.028	

### **SUGGESTED PAD LAYOUT**



Symbol	Unit (mm)	Unit (inch)
Α	1.50	0.059
В	0.90	0.035
С	4.22	0.166
D	7.22	0.284
E	2.05	0.081
F	5.72	0.225

## **MARKING DIAGRAM**



P/N = Marking Code YW = Date Code

F = Factory Code

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Taiwan Semiconductor

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