Unit: mm

TOSHIBA Diode Silicon Epitaxial Planar Type

# **1SS311**

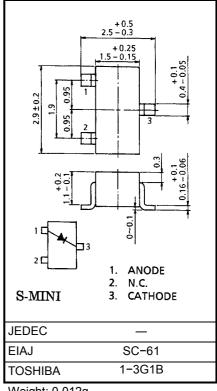
### High Voltage, High Speed Switching Applications

 Low forward voltage  $V_F = 0.94 V \text{ (typ.)}$  $: V_R = 400V \text{ (min)}$ High voltage Fast reverse recovery time:  $t_{rr} = 1.5ns$  (typ.) Small total capacitance  $: C_T = 3.2pF (typ.)$ 

Small package : SC-59

## **Maximum Ratings (Ta = 25°C)**

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	$V_{RM}$	420	V
Reverse voltage	V <sub>R</sub>	400	V
Maximum (peak) forward current	I <sub>FM</sub>	300	mA
Average forward current	Io	100	mA
Surge current (10ms)	I <sub>FSM</sub>	2	Α
Power dissipation	Р	150	mW
Junction temperature	Tj	125	°C
Storage temperature	T <sub>stg</sub>	-55~125	°C



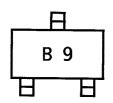
Weight: 0.012g

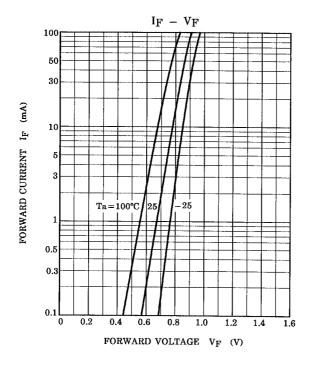
### **Electrical Characteristics (Ta = 25°C)**

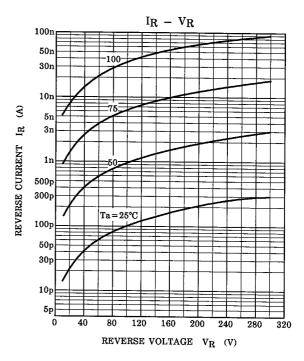
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit	
Forward voltage	V <sub>F (1)</sub>	_	I <sub>F</sub> = 10mA	1	0.80	-	.,	
	V <sub>F (2)</sub>	_	I <sub>F</sub> = 100mA	1	0.94	1.20	V	
Reverse current	I <sub>R (1)</sub>	_	V <sub>R</sub> = 300V	1	1	0.1		
	I <sub>R (2)</sub>		V <sub>R</sub> = 400V	1	1	1.0	μA	
Total capacitance	СТ	_	V <sub>R</sub> = 0, f = 1MHz		3.2	5.0	pF	
Reverse recovery time	t <sub>rr</sub>	_	I <sub>F</sub> = 10mA	_	1.5		μs	

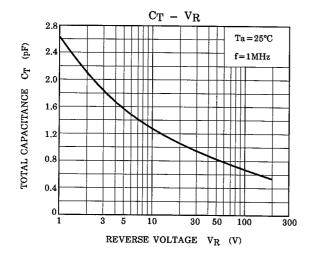
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### Marking









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