

TOSHIBA Diode Silicon Epitaxial Planar Type

1SS311

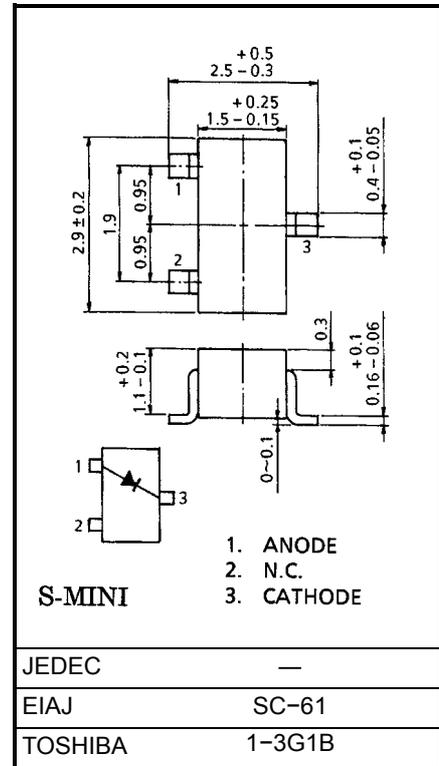
High Voltage, High Speed Switching Applications

Unit: mm

- Low forward voltage : $V_F = 0.94V$ (typ.)
- High voltage : $V_R = 400V$ (min)
- 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_R	400	V
Maximum (peak) forward current	I_{FM}	300	mA
Average forward current	I_O	100	mA
Surge current (10ms)	I_{FSM}	2	A
Power dissipation	P	150	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55~125	°C



Weight: 0.012g

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	V_F (1)	—	$I_F = 10mA$	—	0.80	—	V
	V_F (2)	—	$I_F = 100mA$	—	0.94	1.20	
Reverse current	I_R (1)	—	$V_R = 300V$	—	—	0.1	μA
	I_R (2)	—	$V_R = 400V$	—	—	1.0	
Total capacitance	C_T	—	$V_R = 0, f = 1MHz$	—	3.2	5.0	pF
Reverse recovery time	t_{rr}	—	$I_F = 10mA$	—	1.5	—	μs

Marking

