

TOSHIBA Diode Silicon Epitaxial Planar Type

1SS306

High Voltage, High Speed Switching Applications

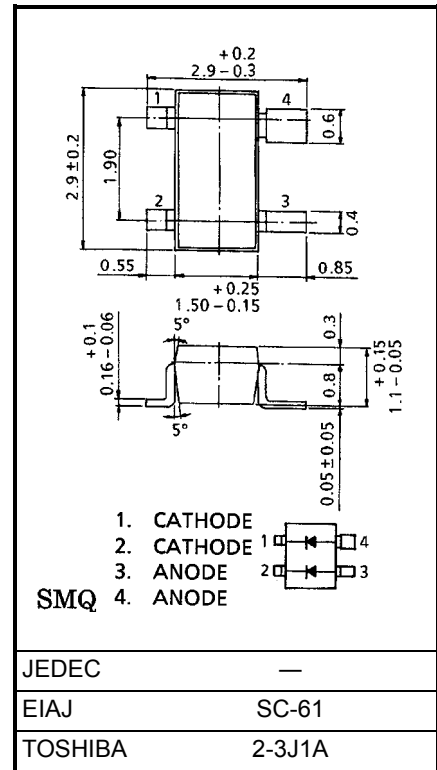
- Low forward voltage : $V_F (2) = 0.90V$ (typ.)
- Fast reverse recovery time: $t_{rr} = 30ns$ (max)
- Small total capacitance : $C_T = 1.5pF$ (typ.)
- Small package : SC-61

Maximum Ratings ($T_a = 25^\circ C$)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	250	V
Reverse voltage	V_R	200	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	$^\circ C$
Storage temperature	T_{stg}	-55~125	$^\circ C$

*: Unit rating. Total rating = unit rating \times 1.5

Unit in mm



Weight: 0.013g

Electrical Characteristics ($T_a = 25^\circ C$)

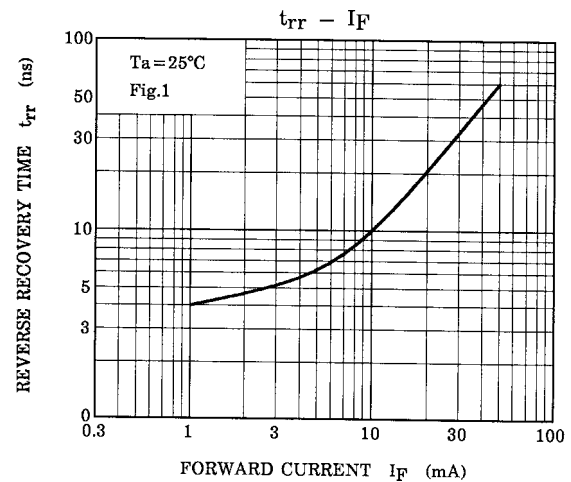
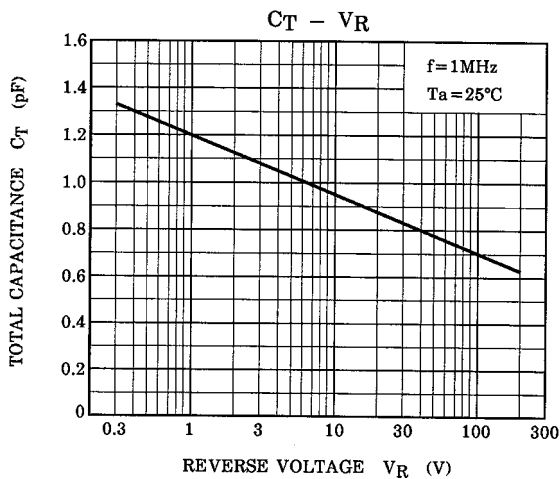
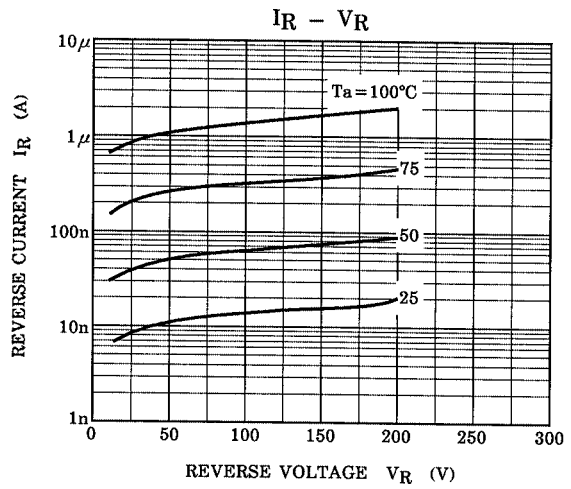
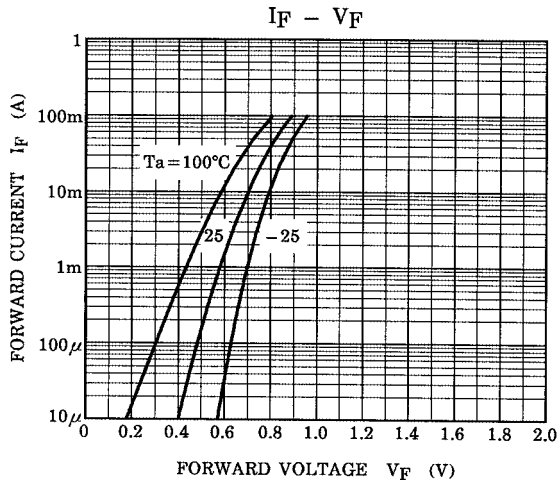
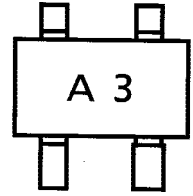
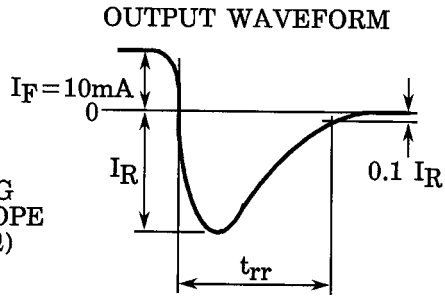
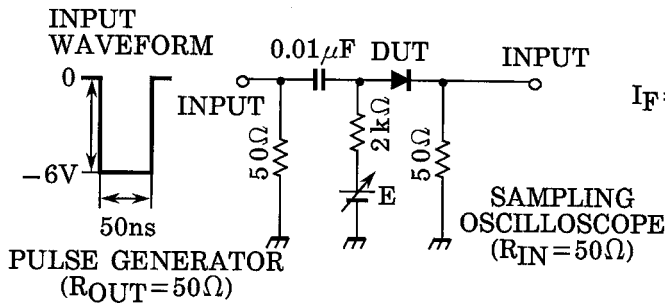
Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F (1)$	—	$I_F = 10mA$	—	0.72	1.0	V
	$V_F (2)$	—	$I_F = 100mA$	—	0.9	1.2	
Reverse current	$I_R (1)$	—	$V_R = 50V$	—	—	0.1	μA
	$I_R (2)$	—	$V_R = 200V$	—	—	1.0	
Total capacitance	C_T	—	$V_R = 0, f = 1MHz$	—	1.5	3.0	pF
Reverse recovery time	t_{rr}	—	$I_F = 10mA$ Fig.1	—	30	60	ns

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Fig.1 Reverse Recovery Time (t_{rr}) Test Circuit

Marking



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