

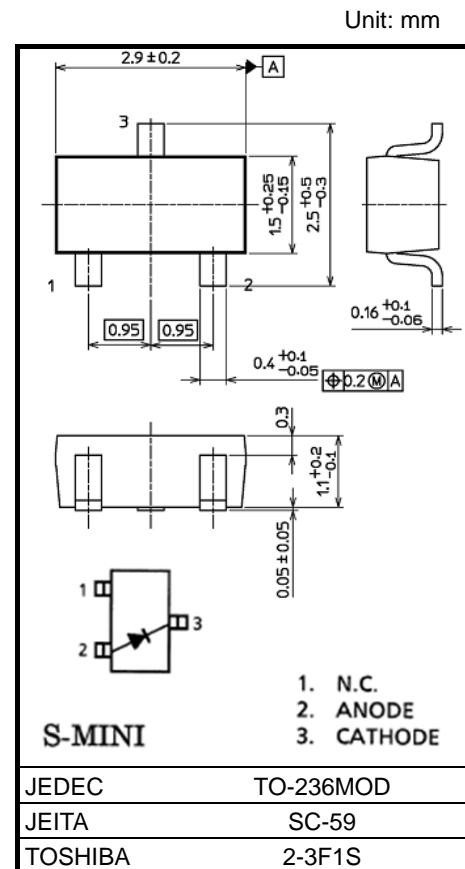
TOSHIBA Diode Silicon Epitaxial Planar Type

1SS196

Ultra High-Speed Switching Applications

- AEC-Q101 Qualified (Note1)
- Small package: SC-59
- Low forward voltage: V_F (3) = 0.90 V (typ.)
- Fast reverse recovery time: t_{rr} = 1.6 ns (typ.)
- Small total capacitance: C_T = 0.9 pF (typ.)

Note1: For detail information, please contact to our sales.



Weight: 12 mg (typ.)

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings. Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc.).

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

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	V_F (1)	$I_F = 1 \text{ mA}$	—	0.60	—	V
	V_F (2)	$I_F = 10 \text{ mA}$	—	0.72	—	
	V_F (3)	$I_F = 100 \text{ mA}$	—	0.90	1.20	
Reverse current	I_R (1)	$V_R = 30 \text{ V}$	—	—	0.1	μA
	I_R (2)	$V_R = 80 \text{ V}$	—	—	0.5	
Total capacitance	C_T	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$	—	0.9	3.0	pF
Reverse recovery time	t_{rr}	$I_F = 10 \text{ mA}$ (Fig.1)	—	1.6	4.0	ns

Start of commercial production
1982-05

Marking

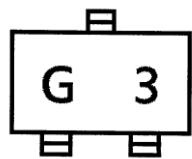
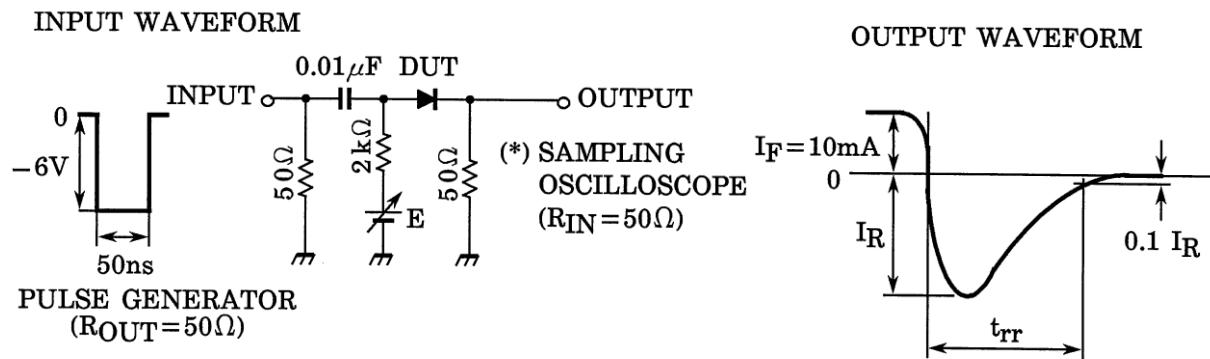
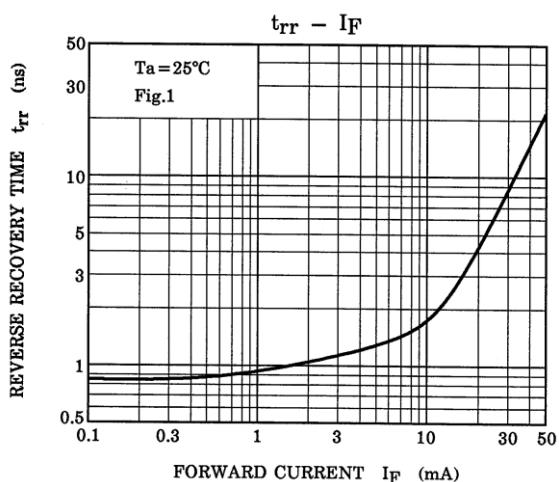
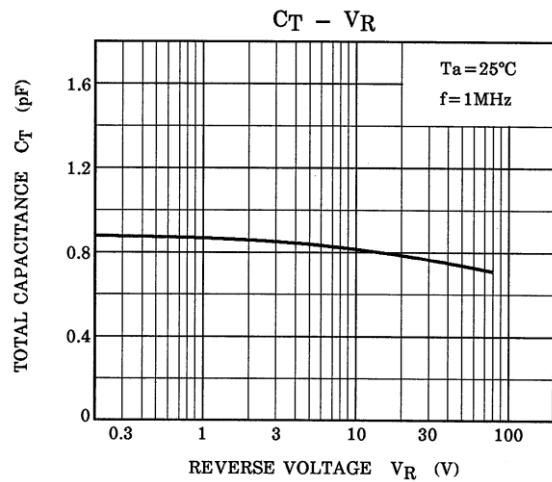
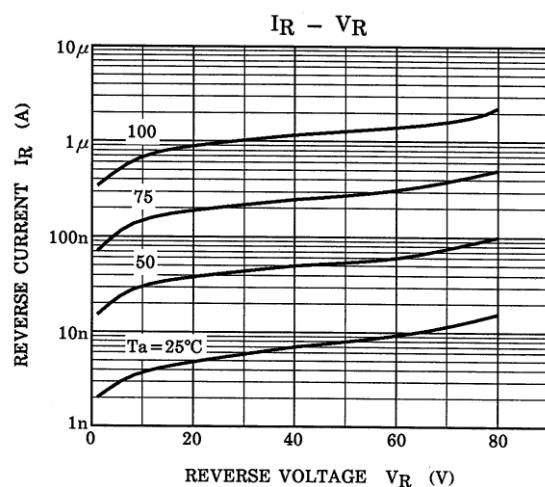
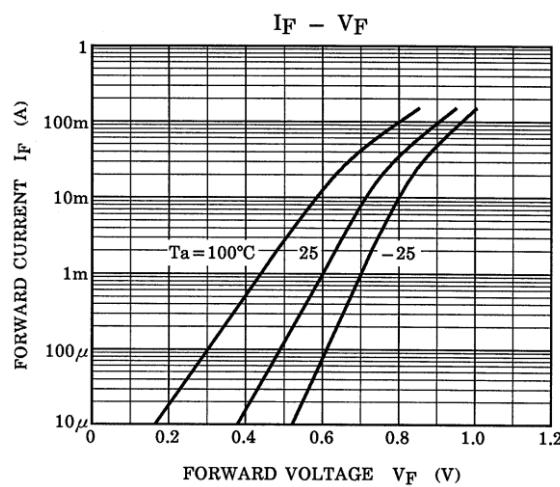


Fig.1 Reverse Recovery Time (t_{rr}) Test Circuit





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