TOSHIBA Diode Silicon Epitaxial Planar Type

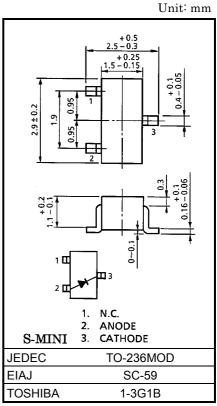
1SS196

Ultra High Speed Switching Application

- Small package : SC-59
- Low forward voltage $: V_{F(3)} = 0.9V (typ.)$
- Fast reverse recovery time: t_{rr} = 1.6ns (typ.)
- Small total capacitance $: C_T = 0.9 pF$ (typ.)

Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit	
Maximum (peak) reverse voltage	V _{RM}	85	V	
Reverse voltage	V _R	80	V	
Maximum (peak) forward current	I _{FM}	300	mA	
Average forward current	Ι _Ο	100	mA	
Surge current (10ms)	I _{FSM}	2	А	
Power dissipation	Р	150	mW	
Junction temperature	Tj	125	°C	
Storage temperature range	T _{stg}	-55~125	°C	

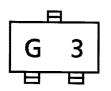


Weight: 0.012g

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit	
Forward voltage	V _{F (1)}	_	I _F = 1mA		0.60		V	
	V _{F (2)}	_	I _F = 10mA		0.72			
	V _{F (3)}	_	I _F = 100mA	_	0.90	1.20		
Reverse current	I _{R (1)}	-	V _R = 30V	-	_	0.1		
	I _{R (2)}	_	V _R = 80V	_	—	0.5	μA	
Total capacitance	CT	_	V _R = 0, f = 1MHz	_	0.9	3.0	pF	
Reverse recovery time	t _{rr}	_	I _F = 10mA (Fig.1)		1.6	4.0	ns	

Marking



TOSHIBA

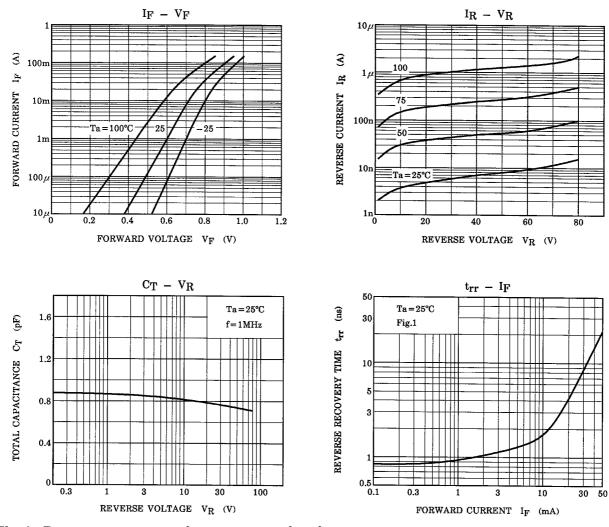
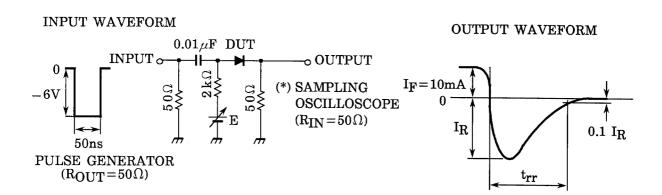


Fig.1 Reverse recovery time (t_{rr}) test circuit



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