TOSHIBA Diode Silicon Epitaxial Planar Type

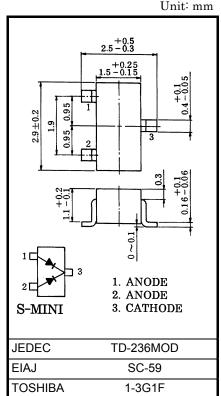
1SS337

Ultra High Speed Switching Application

- Small package : SC-59
- $: V_{F(3)} = 0.88V (typ.)$ Low forward voltage
- Fast reverse recovery time: $t_{rr} = 6ns$ (typ.)
- $: C_{T} = 1.6 pF (typ.)$ Small total capacitance

Absolute 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}	600 *	mA	
Average forward current	Ι _Ο	200 *	mA	
Surge current (10ms)	I _{FSM}	6 *	А	
Power dissipation	Р	150	mW	
Junction temperature	Tj	150	°C	
Storage temperature	T _{stg}	-55~150	°C	



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

Weight: 0.012g

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).

*: Unit rating. Total rating = unit rating × 1.5

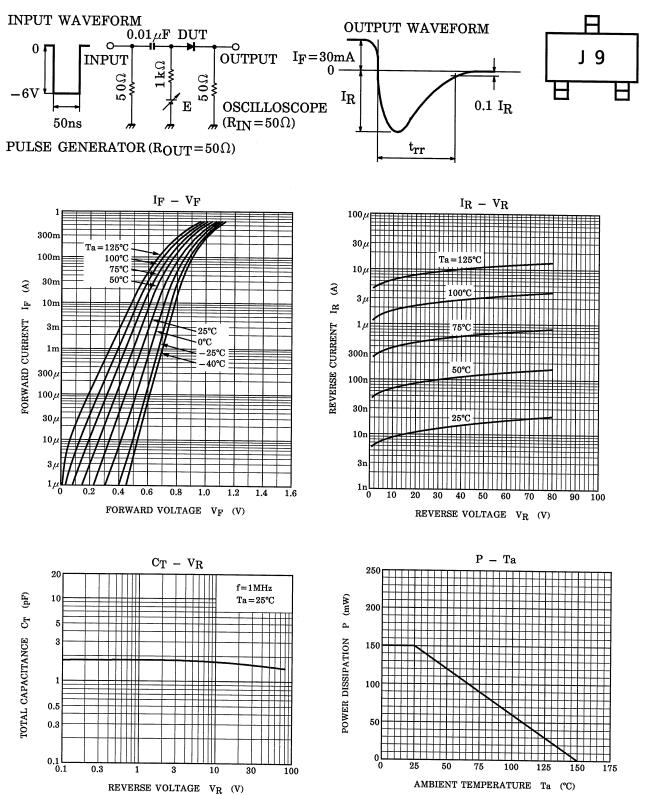
Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Forward voltage	V _{F (1)}	_	I _F = 10mA		0.66		
	V _{F (2)}	—	I _F = 100mA		0.80		V
	V _{F (3)}	—	I _F = 200mA		0.88	1.20	
Reverse current	I _{R (1)}	—	V _R = 30V			0.25	μΑ
	I _{R (2)}	—	V _R = 80V			0.50	
Total capacitance	CT	—	V _R = 0, f = 1MHz		1.6		pF
Reverse recovery time	t _{rr}	_	I _F = 30mA, Fig.1	_	6	20	ns

Unit: mm

TOSHIBA

Fig.1 Reverse Recovery Time (trr) Test Circuit Marking



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20070701-EN GENERAL

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