TOSHIBA Diode Silicon Epitaxial Planar Type

# **1SS337**

## Ultra High Speed Switching Application

• Small package : SC-59

Low forward voltage : VF (3) = 0.88V (typ.)
 Fast reverse recovery time: trr = 6ns (typ.)
 Small total capacitance : CT = 1.6pF (typ.)

## Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit	
Maximum (peak) reverse voltage	$V_{RM}$	85	V	
Reverse voltage	V <sub>R</sub>	80	V	
Maximum (peak) forward current	I <sub>FM</sub>	600 *	mA	
Average forward current	Io	200 *	mA	
Surge current (10ms)	I <sub>FSM</sub>	6 *	Α	
Power dissipation	Р	150	mW	
Junction temperature	Tj	150	°C	
Storage temperature	T <sub>stg</sub>	-55~150	°C	

<sup>\*:</sup> Unit rating. Total rating = unit rating × 1.5

# Unit: mm 2.5-0.3 -0.5 -0.5 -0.5 -0.5 -0.15 -

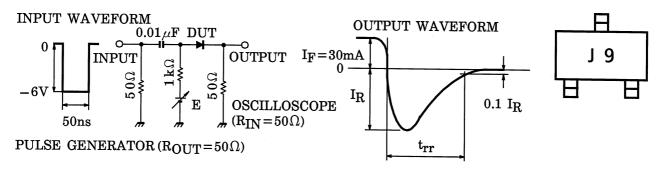
Weight: 0.012g

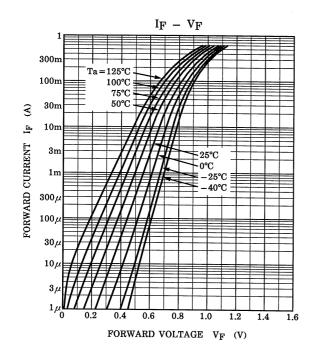
## **Electrical Characteristics (Ta = 25°C)**

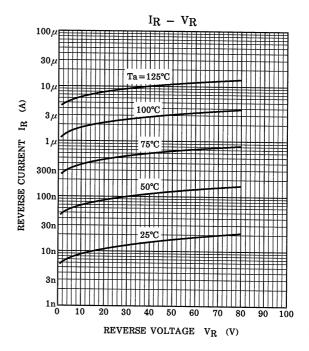
Characteristic	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit	
Forward voltage	V <sub>F (1)</sub>	_	I <sub>F</sub> = 10mA	1	0.66	1		
	V <sub>F (2)</sub>	_	I <sub>F</sub> = 100mA	_	0.80	_	٧	
	V <sub>F (3)</sub>	_	I <sub>F</sub> = 200mA	_	0.88	1.20		
Reverse current	I <sub>R (1)</sub>	_	V <sub>R</sub> = 30V	_	_	0.25		
	I <sub>R (2)</sub>	_	V <sub>R</sub> = 80V	_	_	0.50	μA	
Total capacitance	C <sub>T</sub>	_	V <sub>R</sub> = 0, f = 1MHz		1.6		pF	
Reverse recovery time	t <sub>rr</sub>	_	I <sub>F</sub> = 30mA, Fig.1	-	6	20	ns	

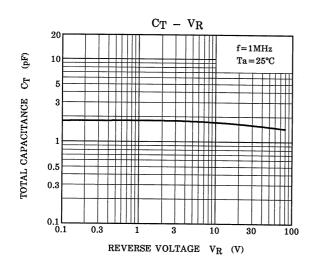
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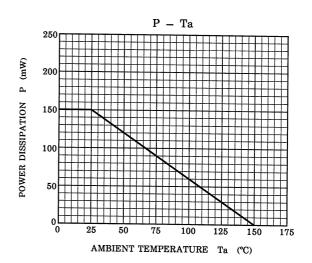
Fig.1 Reverse Recovery Time (trr) Test Circuit Marking











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