TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

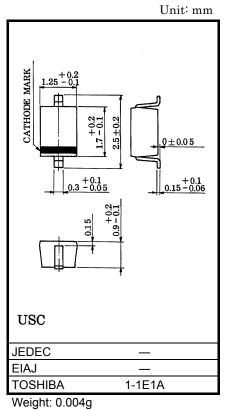
# **1SS367**

### High Speed Switching Application

- Small package
- Low forward voltage:  $V_F = 0.23V$  (typ.) @I<sub>F</sub> = 5mA

### Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit	
Maximum (peak) reverse voltage	V <sub>RM</sub>	15	V	
Reverse voltage	V <sub>R</sub>	10	V	
Maximum (peak) forward current	I <sub>FM</sub>	200	mA	
Average forward current	Ι <sub>Ο</sub>	100	mA	
Surge current (10ms)	I <sub>FSM</sub>	1	А	
Power dissipation	P *	200	mW	
Junction temperature	Tj	125	°C	
Storage temperature	T <sub>stg</sub>	-55~125	°C	
Operating temperature range	T <sub>opr</sub>	-40~100	°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

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).

\* Mounted on a glass epoxy circuit board of  $20 \times 20$  mm Pad dimension of  $4 \times 4$  mm.

#### 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> = 1mA	_	0.18	_	
	V <sub>F (2)</sub>	_	I <sub>F</sub> = 5mA	_	0.23	0.30	V
	V <sub>F (3)</sub>	_	I <sub>F</sub> = 100mA	_	0.35	0.50	
Reverse current	Ι <sub>R</sub>	_	V <sub>R</sub> = 10V	_	—	20	μA
Total capacitance	CT	_	V <sub>R</sub> = 0, f = 1MHz	_	20	40	pF

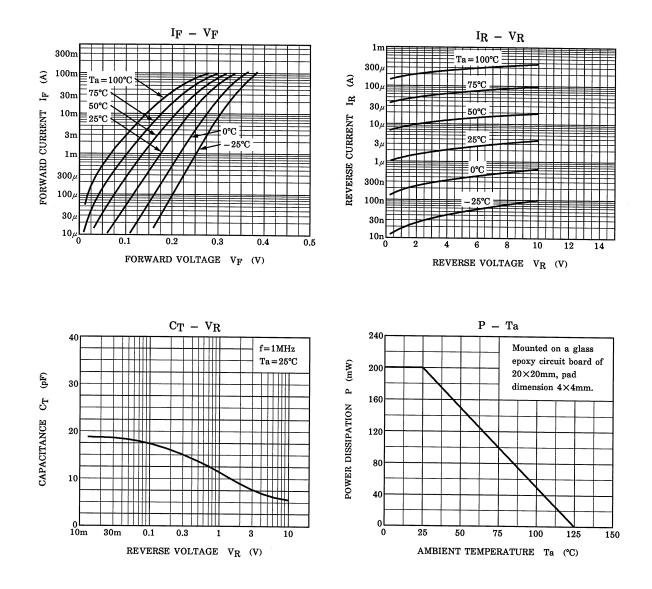
# Equivalent Circuit (Top View)

Marking





# **TOSHIBA**



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20070701-EN GENERAL

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