## TOSHIBA DIODE SILICON EPITAXIAL SCHOTTKY BARRIER TYPE

# **1 S S 3 7 7**

HIGH SPEED SWITCHING.

Low Forward Voltage :  $V_F = 0.23 V$  (Typ.)  $@I_F = 5 mA$ 

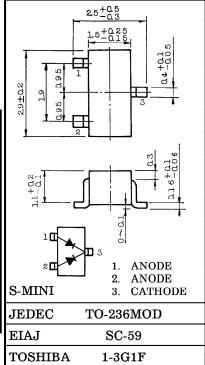
Small Package : SC-59

### MAXIMUM RATINGS ( $Ta = 25^{\circ}C$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Maximum (Peak) Reverse Voltage	$v_{RM}$	15	v	
Reverse Voltage	$V_{ m R}$	10	V	
Maximum (Peak) Forward Current	$I_{\mathbf{FM}}$	200 ※	mA	
Average Forward Current	IO	100 ※	mA	
Surge Current (10ms)	$I_{FSM}$	1 ※	Α	
Power Dissipation	P	150	mW	
Junction Temperature	$T_j$	125	°C	
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~125	$^{\circ}\mathrm{C}$	
Operating Temperature Range	T <sub>opr</sub> -40~10		°C	

\* : Unit Rating. Total Rating=Unit Rating × 1.5

# Unit in mm



Weight: 0.012g

## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_{F(1)}$	I <sub>F</sub> =1mA		0.18	_	V
	$V_{\mathbf{F}(2)}$	$I_{\mathbf{F}} = 5 \text{mA}$		0.23	0.30	V
	$V_{\mathbf{F(3)}}$	$I_{ m F} = 100 { m mA}$		0.35	0.50	V
Reverse Current	$I_{ m R}$	$V_R = 10V$	_	_	20	$\mu$ A
Total Capacitance	$\mathbf{c_T}$	$V_R=0$ , f=1MHz	_	20	40	рF

## **EQUIVALENT CIRCUIT (TOP VIEW)**



### Marking



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