## TOSHIBA DIODE SILICON EPITAXIAL SCHOTTKY BARRIER TYPE

# 1 S S 3 9 4

#### HIGH SPEED SWITCHING APPLICATION

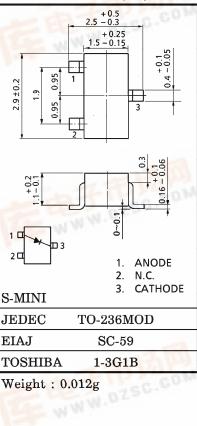
Small Package

Low Forward Voltage:  $V_{F(2)} = 0.23V (Typ.)$  @ $I_F = 5mA$ 

#### MAXIMUM RATINGS (Ta = 25°C)

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

#### Unit in mm



Weight: 0.012g

### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V <sub>F(1)</sub>	I <sub>F</sub> =1mA	_	0.18	_	
	$V_{F(2)}$	$I_{\mathbf{F}} = 5$ mA	_	0.23	0.30	V
	$V_{F(3)}$	$I_{ m F}\!=\!100{ m mA}$		0.35	0.50	
Reverse Current	$I_{\mathbf{R}}$	$V_R = 10V$		-4	20	$\mu$ A
Total Capacitance	$\mathrm{C}_{\mathbf{T}}$	$V_R=0$ , f=1MHz		20	40	pF

#### **MARKING**



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