TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# **1SS154**

#### UHF~S Band Mixer/Detector Applications

Unit: mm

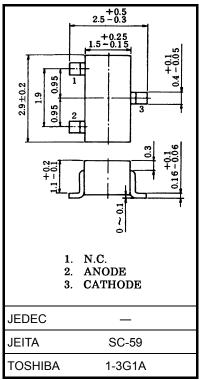
• Small package.

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

Characteristics	Symbol	Rating	Unit
Reverse voltage	$V_{R}$	6	V
Forward current	lF	30	mA
Junction temperature	Tj	125	°C
Storage temperature range	T <sub>stg</sub>	-30 to 125	°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).

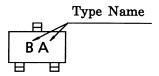


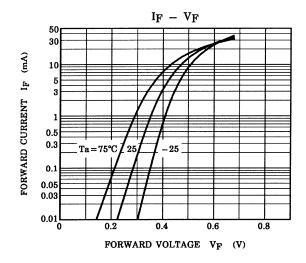
Weight: 12 mg (typ.)

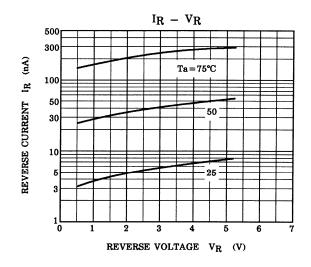
### **Electrical Characteristics (Ta = 25°C)**

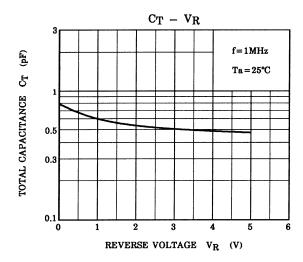
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	$V_{R}$	$I_R = 10 \mu A$	6	_	_	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 5 V	_	_	0.5	μА
Forward voltage	V <sub>F (1)</sub>	I <sub>F</sub> = 0.1 mA	_	_	0.35	V
Forward voltage	V <sub>F (2)</sub>	I <sub>F</sub> = 10 mA	_	0.5	_	V
Total capacitance	C <sub>T</sub>	V <sub>R</sub> = 0, f = 1 MHz	_	0.8	_	pF

#### Marking









2

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3