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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# **1SS315**

### **UHF Band Mixer Applications**

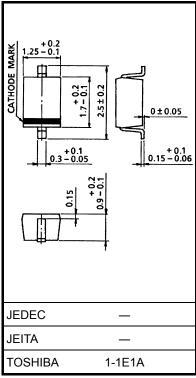
Unit: mm

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

Characteristics	Symbol	Rating	Unit
Maximum (peak) reverse voltage	$V_{RM}$	5	V
Forward current	lF	30	mA
Junction temperature	Tj	125	°C
Storage temperature range	T <sub>stg</sub>	-55 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).



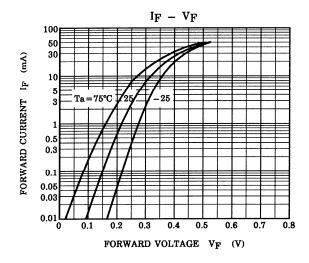
Weight: 0.004 g (typ.)

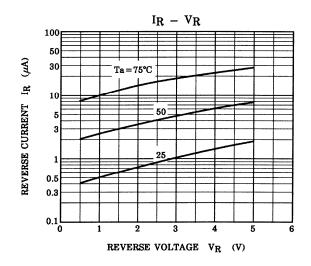
#### **Electrical Characteristics (Ta = 25°C)**

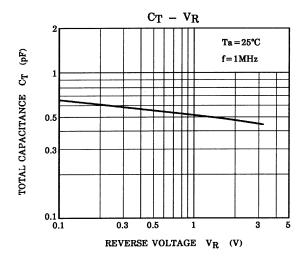
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 2 mA	_	0.25	_	V
Forward current	l <sub>F</sub>	V <sub>F</sub> = 0.5 V	30	_	_	mA
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 0.5 V	_	_	25	μА
Total capacitance	C <sub>T</sub>	V <sub>R</sub> = 0.2 V, f = 1 MHz	_	0.6	_	pF

#### Marking









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