TOSHIBA Diode Silicon Epitaxial Pin Type

# 1SV271

#### VHF to UHF Band RF Attenuator Applications

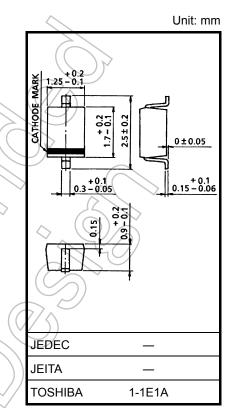
- Useful for small size tuner
- Small total capacitance:  $C_T = 0.25 \text{ pF}$  (typ.)
- Low series resistance:  $r_s = 3 \Omega$  (typ.)

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

Characteristics	Symbol	Rating	Unit
Reverse voltage	VR	50	V
Forward current	١ <sub>F</sub>	50	( mA )
Junction temperature	Tj	125	°C
Storage temperature range	T <sub>stg</sub>	-55 to 125	್

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.)

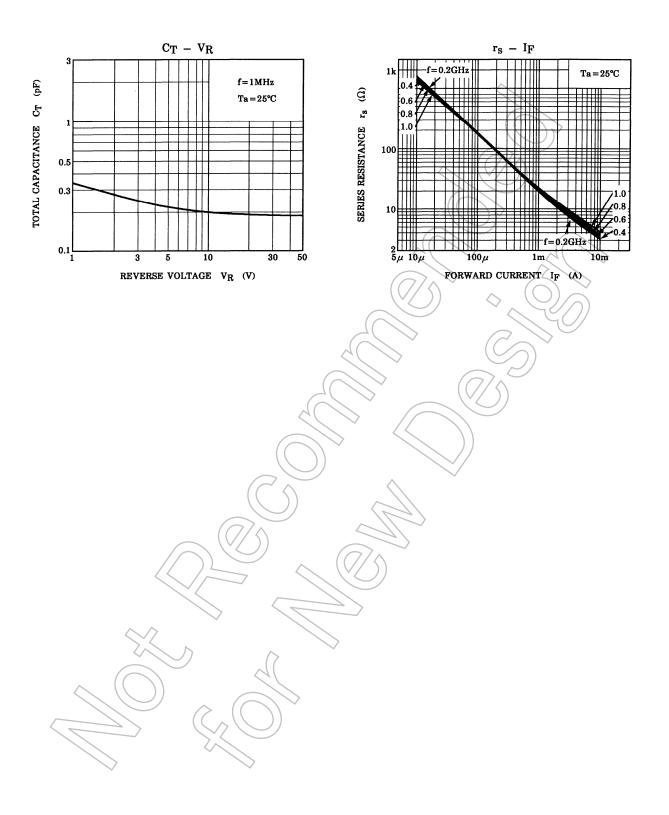
## Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	VR	l <sub>R</sub> = 10 μA	50	_	_	V
Reverse current	IR	V <sub>R</sub> = 50 V	_	_	0.1	μA
Forward voltage	VF	I <sub>F</sub> = 50 mA	_	0.93	1.0	V
Total capacitance	CŢ	V <sub>R</sub> = 50 V, f = 1 MHz	_	0.25	0.4	pF
Series resistance	rs	I <sub>F</sub> = 10 mA, f = 100 MHz	_	3	_	Ω

#### Marking



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