TOSHIBA Diode Silicon Epitaxial PIN Type

# JDP2S08SC

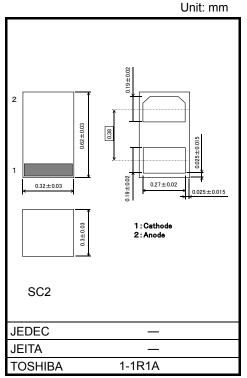
# UHF~VHF Band RF Switch Applications

- Suitable for reducing set's size as a result from enabling high-density mounting due to 2-pin small packages.
- Low series resistance: r<sub>S</sub> = 1.0 Ω (typ.)
- Low capacitance: C<sub>T</sub> = 0.21 pF (typ.)

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

Characteristics	Symbol	Rating	Unit
Reverse voltage	$V_{R}$	30	V
Forward current	lF	50	mA
Junction temperature	Tj	150	°C
Storage temperature range	T <sub>stg</sub>	-55 to 150	°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



Weight: 0.00017 g (typ.)

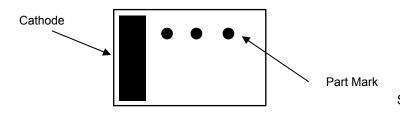
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

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

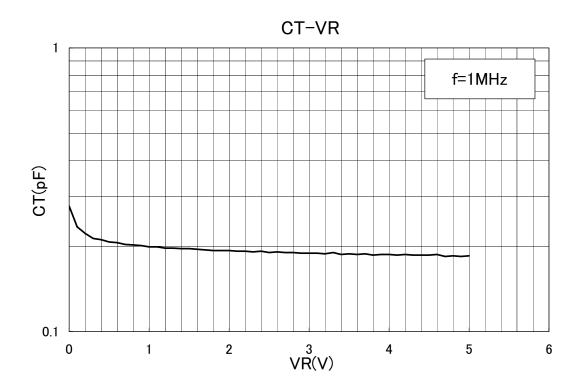
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	$V_{R}$	I <sub>R</sub> = 10 μA	30	_	_	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 30 V	_	_	0.1	μΑ
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 50 mA	_	0.89	0.95	V
Capacitance(Note2)	C <sub>T</sub>	V <sub>R</sub> = 1 V, f = 1 MHz	_	0.21	0.4	pF
Series resistance	r <sub>S</sub>	I <sub>F</sub> = 10 mA, f = 100 MHz	_	1.0	1.5	Ω

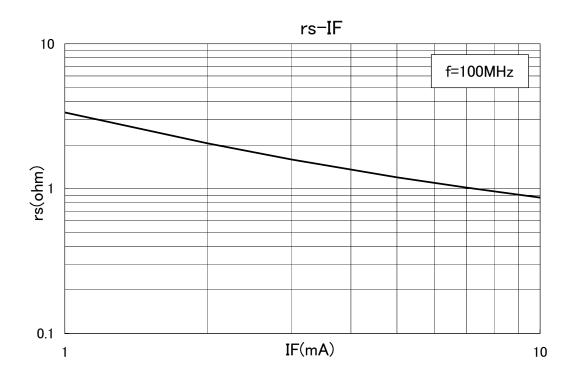
Note1: Signal level when capacitance is measured.  $V_{sig} = 100 \text{ mV}_{rms}$ 

#### Marking



Start of commercial production 2004-11





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