TOSHIBA Diode Silicon Epitaxial PIN Type

# JDP4P02AT

### UHF~VHF Band RF Switch Applications

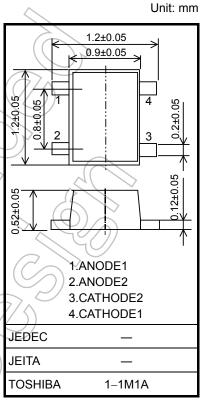
- Suitable for reducing set's size as a result from enabling high-density mounting due to 4-pin small packages.
- Low series resistance:  $r_S = 1.0 \Omega$  (typ.)
- Low capacitance: C<sub>T</sub> = 0.3 pF (typ.)

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

Characteristics	Symbol	Rating	Unit
Reverse voltage	$V_{R}$	30	(y)
Forward current	IF	50	(mA)
Junction temperature	Tj	150	ပို
Storage temperature range	T <sub>stg</sub>	-55 to 150	ပ

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).



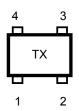
Weight: 0.0015 g(typ.)

## Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	V <sub>R</sub>	l <sub>R</sub> = 10 μA	30	_	_	V
Reverse current	∕ l <sub>R</sub>	V <sub>R</sub> = 30 V	_	_	0.1	μΑ
Forward voltage	VF	I <sub>F</sub> = 50 mA	_	0.9	0.94	٧
Capacitance	C1	V <sub>R</sub> = 1 V, f = 1 MHz	_	0.3	0.4	pF
Series resistance	r <sub>s</sub>	I <sub>F</sub> = 10 mA, f = 100 MHz		1.0	1.5	Ω

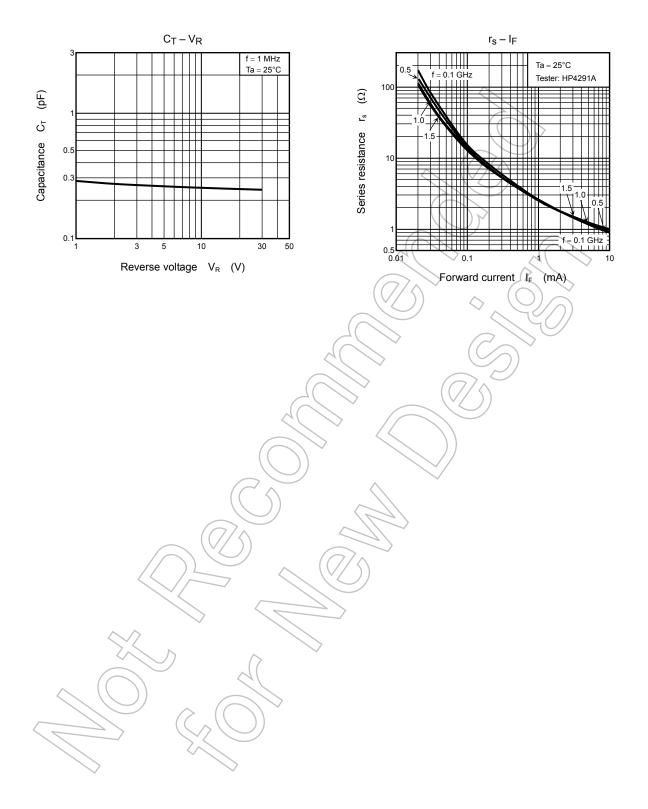
Note: Signal level when capacitance is measured. V<sub>sig</sub> = 100 mVrms

#### Marking



Start of commercial production 2003-08

# Typical Performance Curves (Ta = 25°C)



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