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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.

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TOSHIBA Diode Silicon Epitaxial PIN Type

# JDP4P02AT

## UHF~VHF Band RF Switch Applications

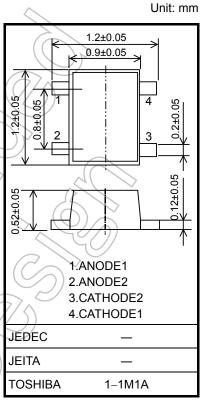
- Suitable for reducing set's size as a result from enabling high-density mounting due to 4-pin small packages.
- Low series resistance:  $r_S = 1.0 \Omega$  (typ.)
- Low capacitance: C<sub>T</sub> = 0.3 pF (typ.)

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

Characteristics	Symbol	Rating	Unit
Reverse voltage	$V_{R}$	30	(y)
Forward current	lF	50	(mA)
Junction temperature	Tj	150	ပို
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.

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).



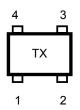
Weight: 0.0015 g(typ.)

### 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

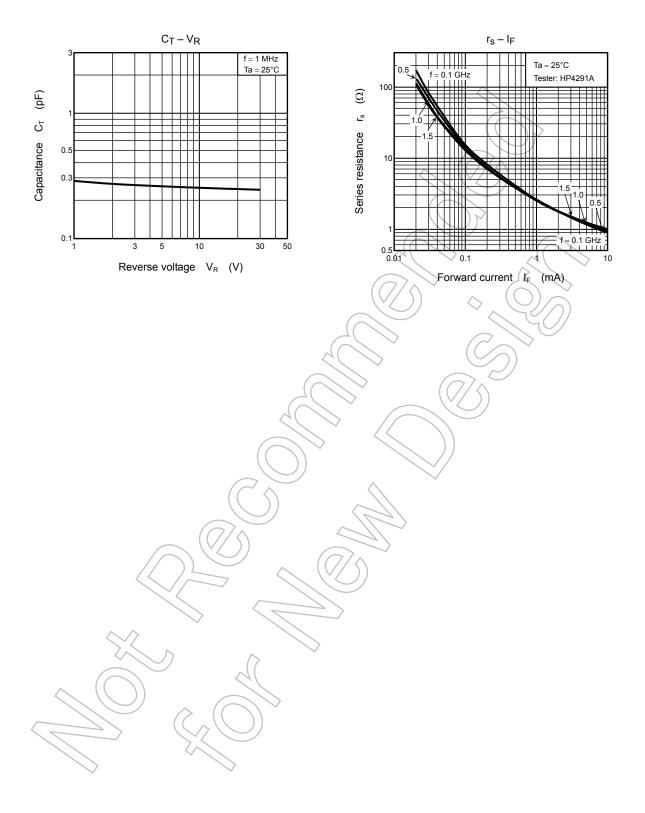
Note: Signal level when capacitance is measured. V<sub>sig</sub> = 100 mVrms

#### Marking



Start of commercial production 2003-08

## Typical Performance Curves (Ta = 25°C)



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