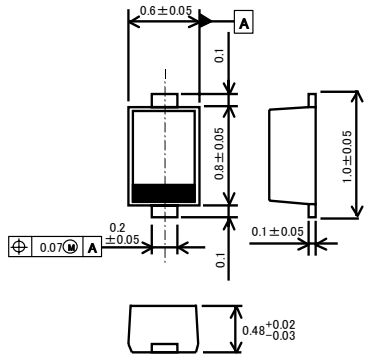
TOSHIBA Diode Silicon Epitaxial PIN Type

JDP2S02AFS

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_s = 1.0 Ω (typ.)
- Low capacitance: C_T = 0.3 pF (typ.)

Unit: mm



JEDEC	—
JEITA	—
TOSHIBA	1-1L1A

Weight: 0.0006 g

Maximum Ratings (Ta = 25°C)

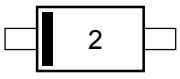
Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Forward current	I_F	50	mA
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	−55~150	°C

Electrical Characteristics (Ta = 25°C)

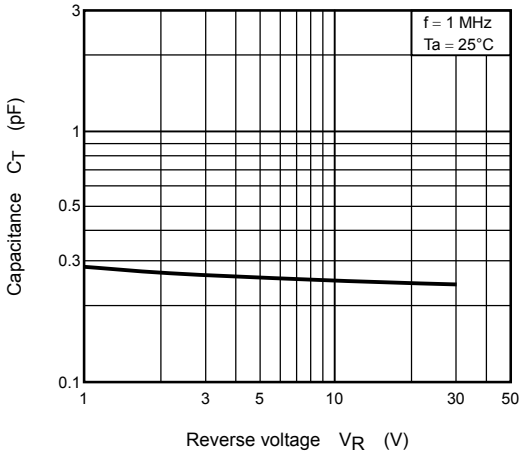
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	I_R = 10 μA	30	—	—	V
Reverse current	I_R	V_R = 30 V	—	—	0.1	μA
Forward voltage	V_F	I_F = 50 mA	—	0.9	0.94	V
Capacitance	C_T	V_R = 1 V, f = 1 MHz	—	0.3	0.4	pF
Series resistance	r_s	I_F = 10 mA, f = 100 MHz	—	1.0	1.5	Ω

Note: Signal level when capacitance is measured. V_{sig} = 100 mVrms

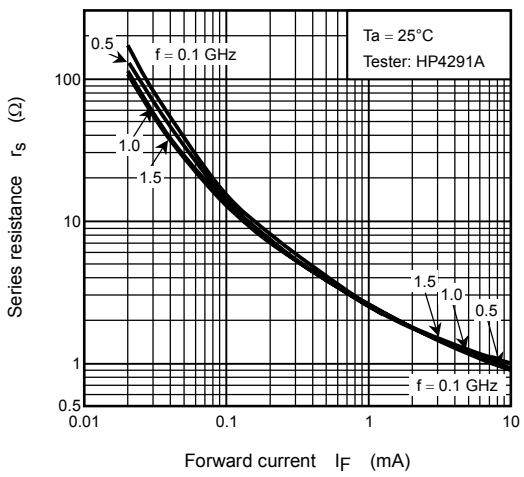
Marking



$C_T – V_R$


f = 1 MHz
Ta = 25°C
Capacitance C_T (pF)
3
1
0.5
0.3
0.1
1
3
5
10
30
50
Reverse voltage V_R (V)

$r_s – I_F$


Ta = 25°C
Tester: HP4291A
f = 0.1 GHz
0.5
1.0
1.5
Series resistance r_s (Ω)
100
10
1
0.5
0.01
0.1
1
10
Forward current I_F (mA)

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