

TOSHIBA Diode Silicon Epitaxial Planar Type

# JDS2S03S

## VHF Tuner Band Switch Applications

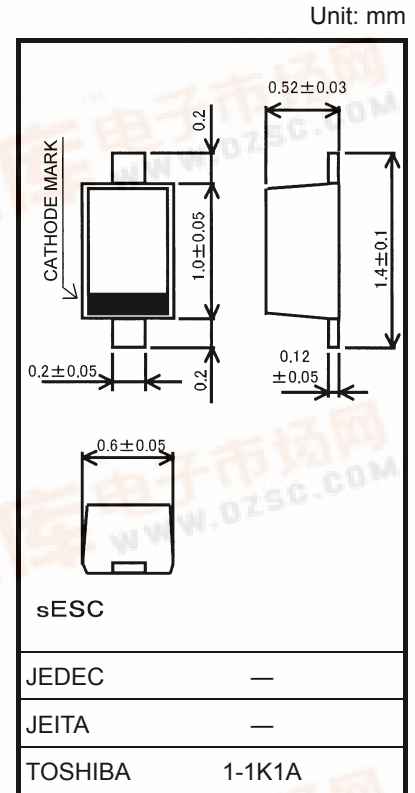
- Suitable for reducing set's size as a result from enabling high-density mounting due to 2-pin small packages.
- Small total capacitance:  $C_T = 0.7 \text{ pF}$  (typ.)
- Low series resistance:  $r_s = 0.6 \text{ } \Omega$  (typ.)

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

Characteristics	Symbol	Rating	Unit
Reverse voltage	$V_R$	30	V
Forward current	$I_F$	100	mA
Junction temperature	$T_j$	150	°C
Storage temperature range	$T_{stg}$	-55~150	°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).



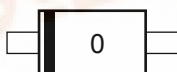
Weight: 0.0011 g

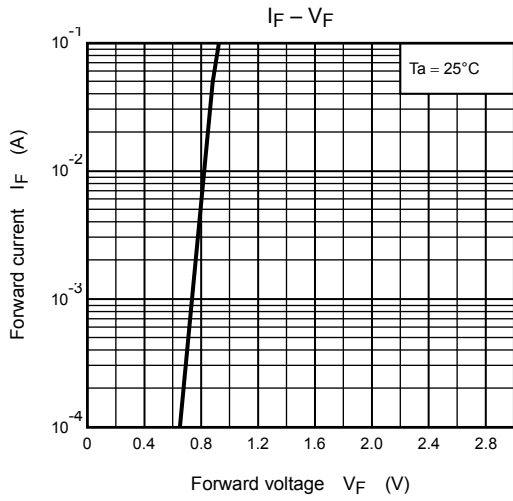
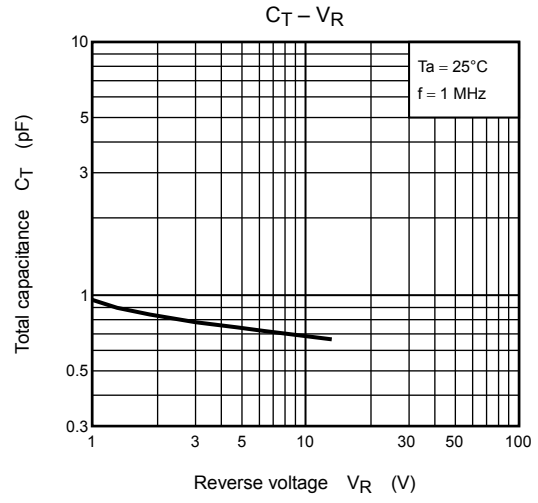
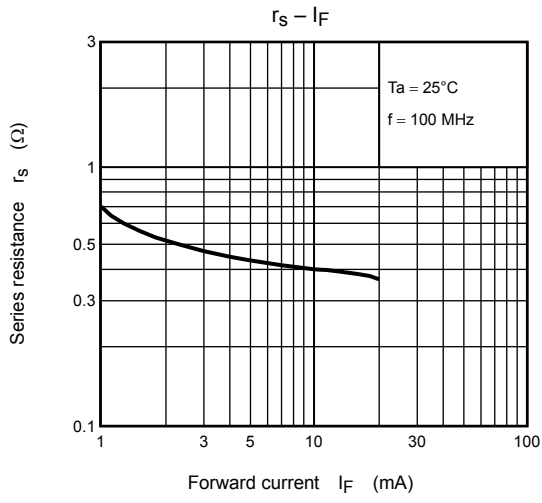
## Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F$	$I_F = 2 \text{ mA}$	—	—	0.85	V
Reverse current	$I_R$	$V_R = 15 \text{ V}$	—	—	0.1	$\mu\text{A}$
Reverse voltage	$V_R$	$I_R = 1 \text{ } \mu\text{A}$	30	—	—	V
Total capacitance	$C_T$	$V_R = 6 \text{ V}, f = 1 \text{ MHz}$	—	0.7	1.2	pF
Series resistance	$r_s$	$I_F = 2 \text{ mA}, f = 100 \text{ MHz}$	—	0.6	0.9	$\Omega$

Note: Signal level when capacitance is measured:  $V_{sig} = 20 \text{ mVrms}$

## Marking





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20070701-EN GENERAL

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