

TOSHIBA Diode Silicon Epitaxial Planar Type

JDS2S03S

VHF Tuner Band Switch Applications

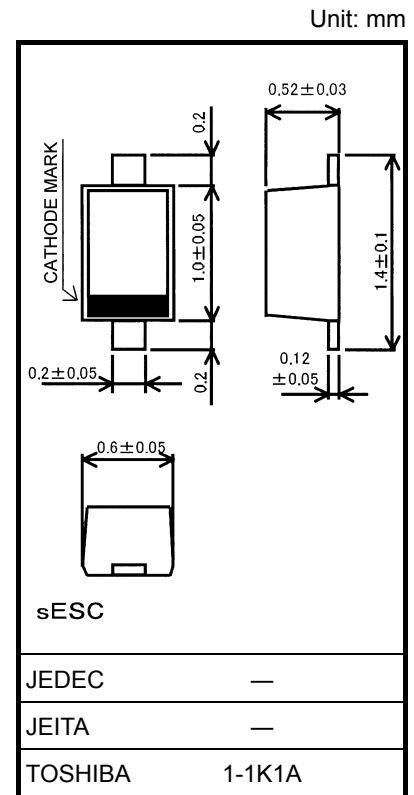
- Suitable for reducing set's size as a result from enabling high-density mounting due to 2-pin small packages.
- Small total capacitance: $C_T = 0.7 \text{ pF}$ (typ.)
- Low series resistance: $r_s = 0.6 \Omega$ (typ.)

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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

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).



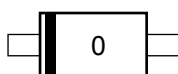
Weight: 0.0011 g

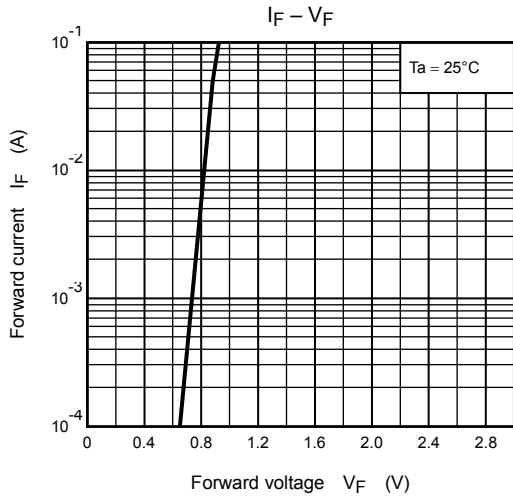
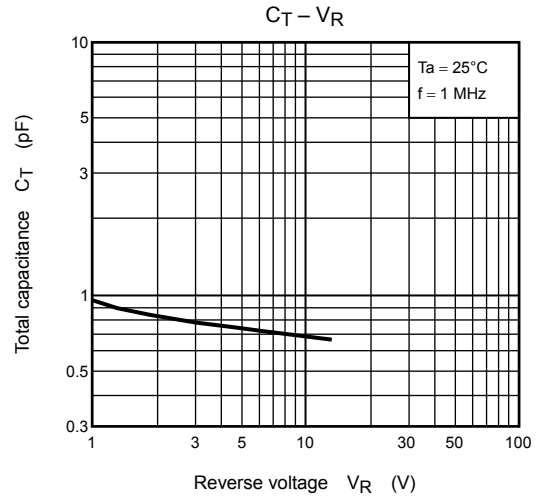
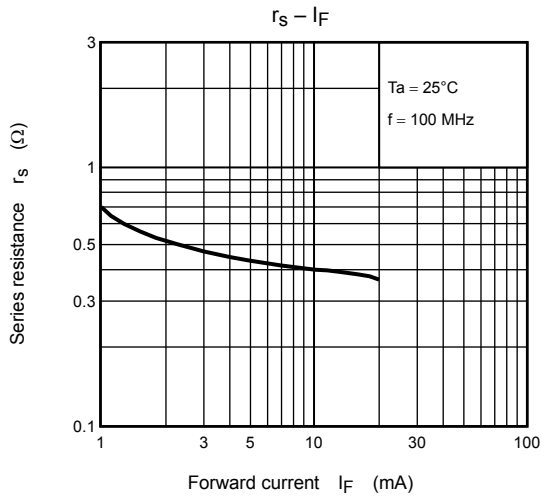
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

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	μA
Reverse voltage	V_R	$I_R = 1 \mu\text{A}$	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	Ω

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

Marking





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20070701-EN GENERAL

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