

TOSHIBA Diode Silicon Epitaxial Planar Type

1SS314

VHF Tuner Band Switch Applications

Unit: mm

- Small package.
- Small total capacitance: $C_T = 1.2 \text{ pF}$ (max)
- Low series resistance: $r_s = 0.5 \Omega$ (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	125	$^\circ\text{C}$
Storage temperature range	T_{stg}	$-55 \sim 125$	$^\circ\text{C}$

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).

		JEDEC	—
		JEITA	—
		TOSHIBA	1-1E1A

Weight: 0.004 g (typ.)

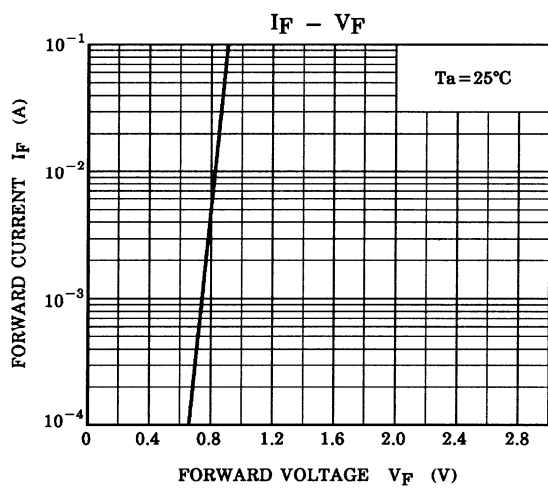
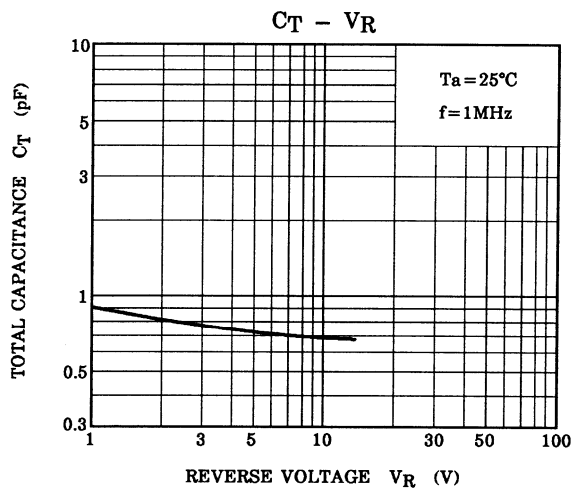
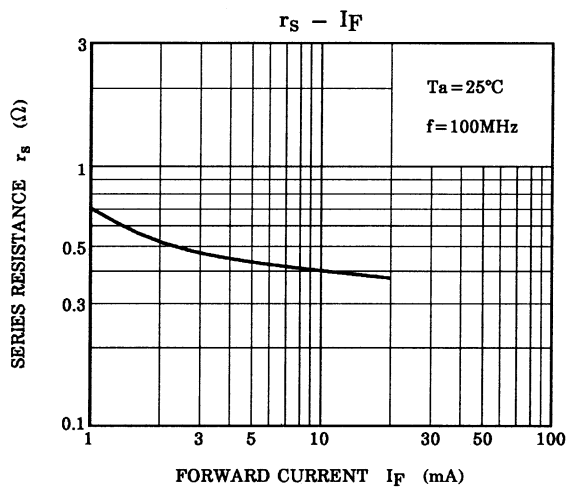
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

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	$I_F = 2 \text{ mA}, f = 100 \text{ MHz}$	—	0.5	0.9	Ω

Marking



Start of commercial production
1987-05



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Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

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