TOSHIBA Diode Silicon Epitaxial Pin Type

1SV307

VHF Tuner Band Switch Applications

Unit: mm

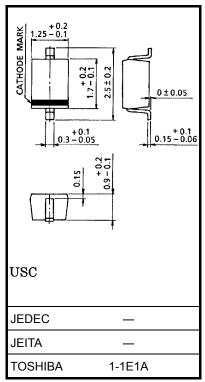
- Small package
- Low series resistance: $r_s = 1.1 \Omega$ (typ.)
- Small total capacitance: $C_T = 0.3 pF$ (typ.)

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_{R}	30	٧
Forward current	lF	50	mA
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	-55 to 125	°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).



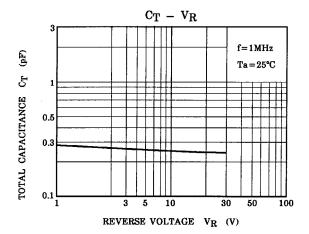
Weight: 0.004 g (typ.)

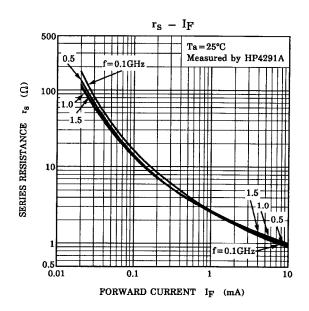
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	V_{R}	Ι _R = 10 μΑ	30	_	_	V
Reverse current	I _R	V _R = 30 V	_	_	0.1	μΑ
Forward voltage	V _F	I _F = 50 mA	_	0.95	1.0	V
Total capacitance	C _T	V _R = 1 V, f = 1 MHz		0.3	0.5	pF
Series resistance 1	r _{s (1)}	I _F = 10 mA, f = 100 MHz		1.0	1.5	Ω
Series resistance 2	r _{s (2)}	I _F = 10 mA, f = 1.5 GHz	_	1.1	_	Ω

Marking







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