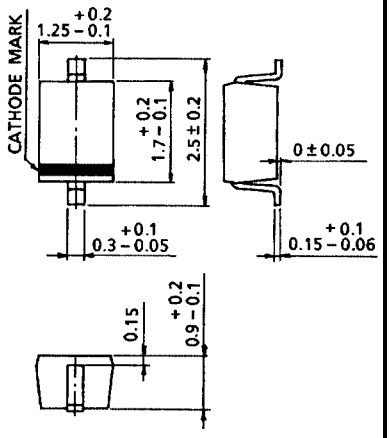
TOSHIBA Diode Silicon Epitaxial Pin Type

1SV271

VHF~UHF Band RF Attenuator Applications

- Useful for small size tuner
- Small total capacitance: C_T = 0.25 pF (typ.)
- Low series resistance: r_s = 3 Ω (typ.)

Unit: mm



JEDEC	—
JEITA	—
TOSHIBA	1-1E1A

Weight: 0.004 g (typ.)

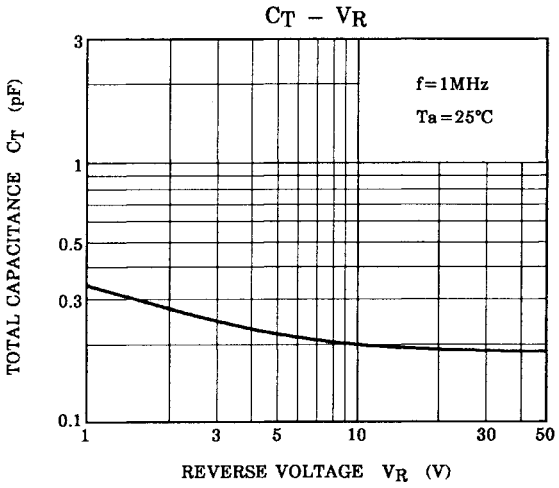
Maximum Ratings (Ta = 25°C)

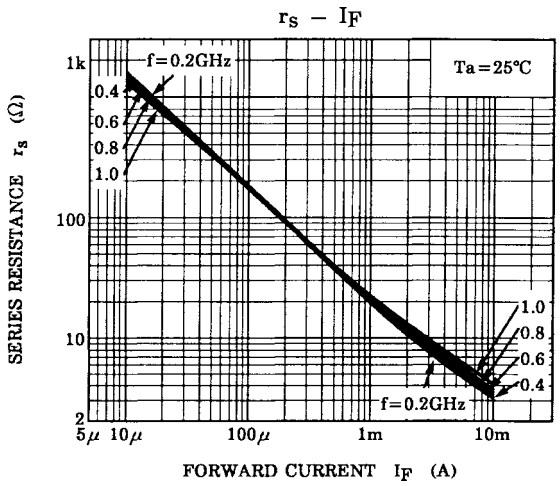
Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	50	V
Forward current	I_F	50	mA
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	−55~125	°C

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	I_R = 10 μA	50	—	—	V
Reverse current	I_R	V_R = 50 V	—	—	0.1	μA
Forward voltage	V_F	I_F = 50 mA	—	0.93	1.0	V
Total capacitance	C_T	V_R = 50 V, f = 1 MHz	—	0.25	0.4	pF
Series resistance	r_s	I_F = 10 mA, f = 100 MHz	—	3	4.5	Ω

Marking


$C_T - V_R$
f=1MHz
Ta=25°C
TOTAL CAPACITANCE C_T (pF)
REVERSE VOLTAGE V_R (V)
3
1
0.5
0.3
0.1
1
3
5
10
30
50


$r_S - I_F$
f=0.2GHz
Ta=25°C
SERIES RESISTANCE r_S (Ω)
FORWARD CURRENT I_F (A)
1k
100
10
2
0.4
0.6
0.8
1.0
5μ
10μ
100μ
1m
10m

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000707EAA

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