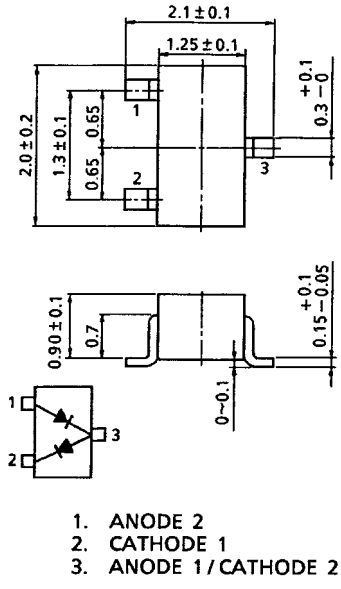
TOSHIBA Diode Silicon Epitaxial Pin Type

1SV252

VHF~UHF Band RF Attenuator Applications

Unit: mm



1. ANODE 2
2. CATHODE 1
3. ANODE 1 / CATHODE 2

JEDEC	—
JEITA	SC-70
TOSHIBA	1-2P1C

Weight: 0.006 g (typ.)

Maximum Ratings (Ta = 25°C)

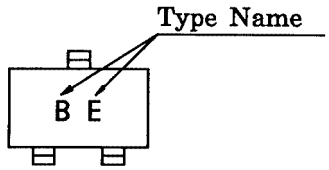
Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	50	V
Forward current	I_F	50	mA
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	−55~125	°C

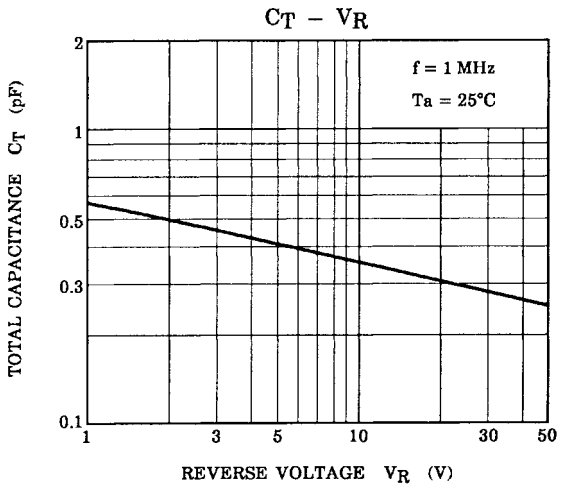
Electrical Characteristics (Ta = 25°C)

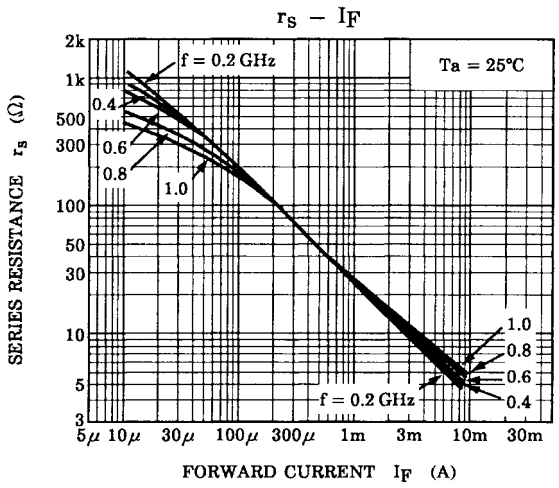
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	I_R = 10 μA	50	—	—	V
Reverse current	I_R	V_R = 50 V	—	—	0.1	μA
Forward voltage	V_F	I_F = 50 mA	—	0.93	0.98	V
Total capacitance (Note)	C_T	V_R = 50 V, f = 1 MHz	—	0.2	0.4	pF
Series resistance	r_s	I_F = 10 mA, f = 100 MHz	—	3.5	10	Ω

Note: C_T is measured by 3 terminal method with capacitance bridge.

Marking




$C_T - V_R$
f = 1 MHz
Ta = 25°C
TOTAL CAPACITANCE C_T (pF)
2
1
0.5
0.3
0.1
1
3
5
10
30
50
REVERSE VOLTAGE V_R (V)


$r_S - I_F$
f = 0.2 GHz
Ta = 25°C
SERIES RESISTANCE r_S (Ω)
2k
1k
500
300
100
50
30
10
5
3
0.4
0.6
0.8
1.0
1.0
0.8
0.6
0.4
f = 0.2 GHz
5μ 10μ 30μ 100μ 300μ 1m 3m 10m 30m
FORWARD CURRENT I_F (A)

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000707EAA

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