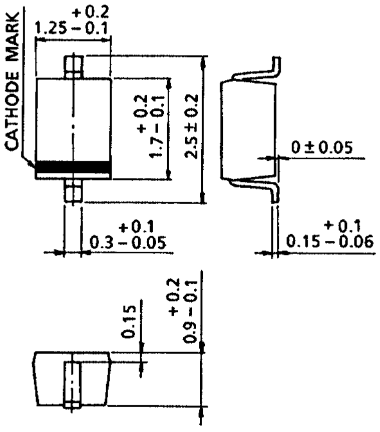
TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

1SV270

VCO for UHF Band Radio

- High capacitance ratio: C1 V/C4 V = 2.0 (typ.)
- Low series resistance: rs = 0.28 Ω (typ.)
- Small package

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	10	V
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	$I_R = 1\ \mu A$	10	―	―	V
Reverse current	I_R	$V_R = 10$ V	―	―	3	nA
Capacitance	C1 V	$V_R = 1$ V, f = 1 MHz	15	16	17	pF
Capacitance	C4 V	$V_R = 4$ V, f = 1 MHz	7.3	8.0	8.7	pF
Capacitance ratio	C1 V/C4 V	―	1.8	2.0	―	―
Series resistance	r_s	$V_R = 1$ V, f = 470 MHz	―	0.28	0.5	Ω

Marking