TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

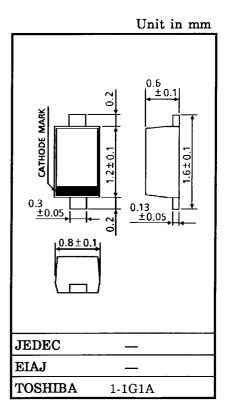
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Useful for VCO/TCXO

- Small Package
- High Capacitance Ratio:  $C_{1V}/C_{4V} = 3.75$  (typ.)
- Low Series Resistance  $: r_s = 0.45 \Omega$  (typ.)

## Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V <sub>R</sub>	10	V
Junction temperature	Тј	125	°C
Storage temperature range	T <sub>stg</sub>	-55~125	°C



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## Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	VR	$I_R = 1 \ \mu A$	10	—	—	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 10 V	_	_	3	nA
Capacitance	C <sub>1V</sub>	$V_R = 1 V$ , f = 1 MHz	17	18	19	рF
	C <sub>4V</sub>	$V_R = 4 V$ , f = 1 MHz	4.25	4.8	5.43	
Capacitance ratio	C <sub>1V</sub> /C <sub>4V</sub>	—	3.5	3.75	_	
Series resistance	r <sub>s</sub>	$V_{R} = 1 V, f = 470 MHz$	_	0.45	0.7	Ω

## Marking



