TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

1 S V 2 8 3

CATV TUNING

High Capacitance Ratio : $C_{2V}/C_{25V}=11.5$ (TYP.)

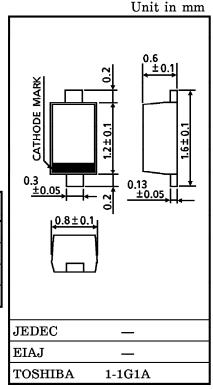
: $r_S = 0.55\Omega$ (TYP.) Low Series Resistance

Excellent C-V Characteristics, and Small Tracking Error.

Useful for Small Size Tuner.

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	$V_{\mathbf{R}}$	34	V
Peak Reverse Voltage	v_{RM}	$36 (R_L = 10 k\Omega)$	V
Junction Temperature	$\mathrm{T_{j}}$	125	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~125	°C



Weight: 0.0014g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	$v_{ m R}$	$I_R = 1 \mu A$	34	_	_	V
Reverse Current	$ m I_R$	$V_R = 32V$		1	10	nA
Capacitance	c_{2V}	$V_R=2V$, $f=1MHz$	29		34	pF
Capacitance	$ m C_{25V}$	V_R =25V, f=1MHz	2.5	I	2.9	рF
Capacitance Ratio	C_{2V}/C_{25V}	_	11.0	11.5	_	_
Capacitance Ratio	$C_{25\mathrm{V}}/C_{28\mathrm{V}}$	_	1.03			_
Series Resistance	$ m r_{S}$	V_R =5V, f=470MHz	_	0.55	0.7	Ω

Note 1: Available in matched group for capacitance to 2.0%.

$$\frac{\text{C (MAX.)-C (MIN.)}}{\text{C (MIN.)}} \leq 0.02$$

 $(V_R = 2 \sim 25V)$

MARKING



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