TOSHIBA DIODE Silicon Epitaxial Planar Type

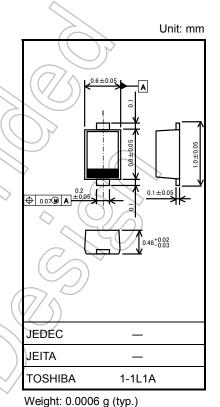
JDV2S07FS

VCO for UHF Band Radio

- High Capacitance Ratio: $C_{1V}/C_{4V} = 2.3$ (typ.)
- Low Series Resistance $: r_s = 0.42 \Omega$ (typ.)
- This device is suitable for use in a small-size tuner.

Maximum Ratings (Ta = 25°C)

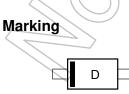
Characteristics	Symbol	Rating	Unit
Reverse voltage	V _R	10	(\sqrt{y})
Junction temperature	Тј	150	°C
Storage temperature range	T _{stg}	-55~150	0°



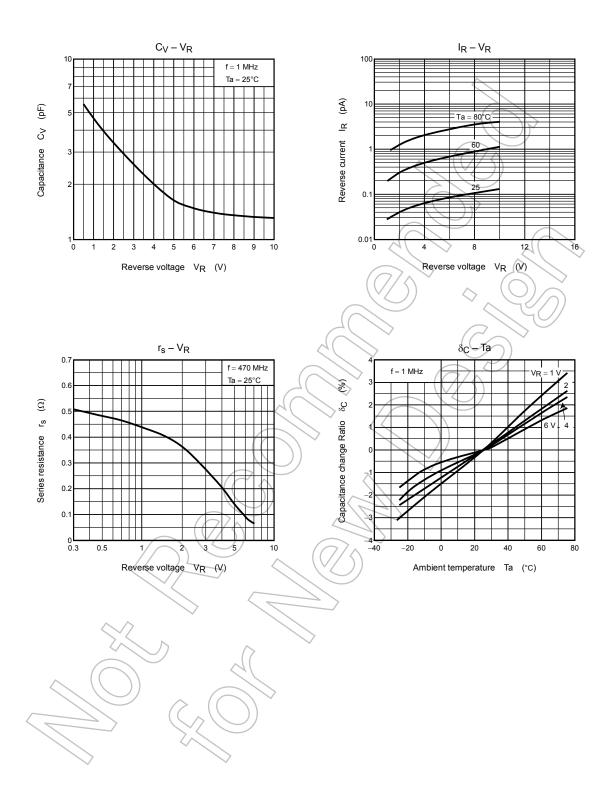
Electrical Characteristics (Ta = 25° C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	V _R	$I_R = 1 \mu A$	10	_	_	V
Reverse current	IR	$V_{R} = 10 V$	_	_	3	nA
Capacitance	C _{1V}	V _R = 1 V, f = 1 MHz	4.0	4.5	4.9	pF
	C _{4V}	V _R = 4 V, f = 1 MHz	1.85	2.0	2.35	
Capacitance ratio	C _{1V} /C _{4V}	_	2.0	2.3	_	_
Series resistance	∧ r _s	V _R = 1 V, f = 470 MHz		0.42	0.55	Ω

Note: Signal level when capacitance is measured: $V_{sig} = 500 \text{ mVrms}$



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