

TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

1SV225

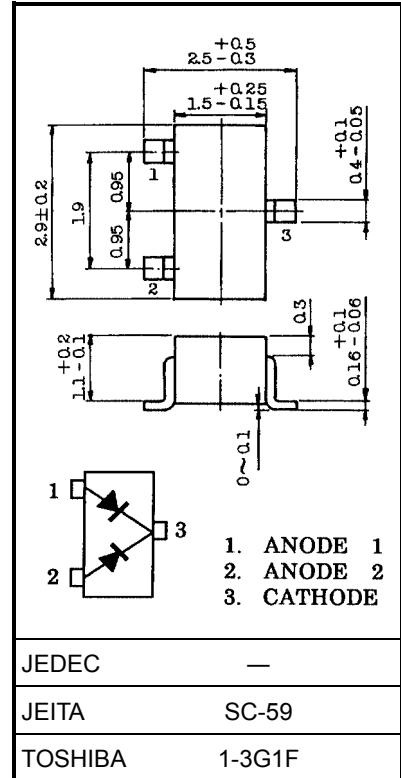
Electronic Tuning Applications of FM Receivers

Unit: mm

- Low series resistance: $r_s = 0.35$ (typ.)
- Small package

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	32	V
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	-55~125	°C



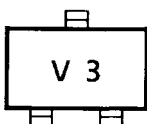
Weight: 0.013 g (typ.)

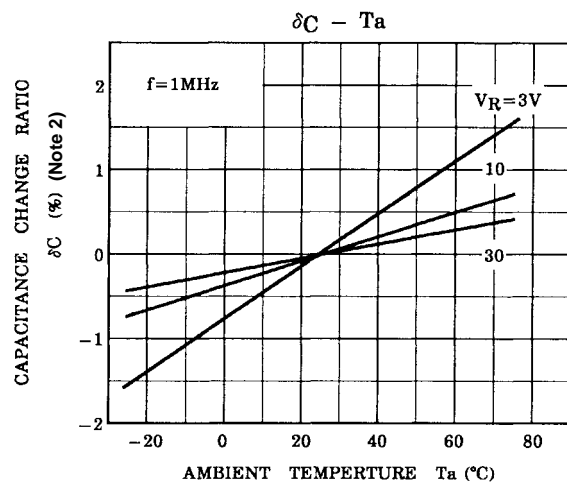
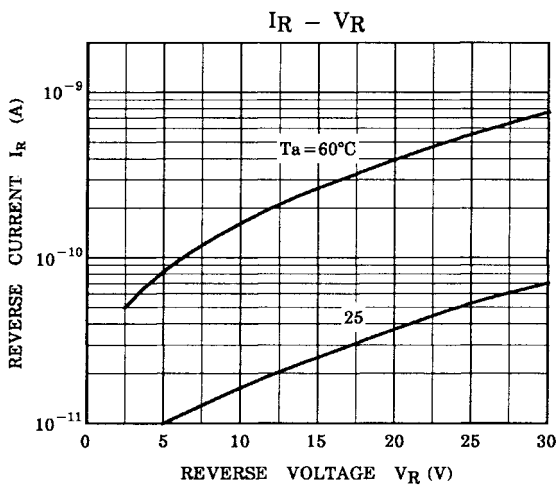
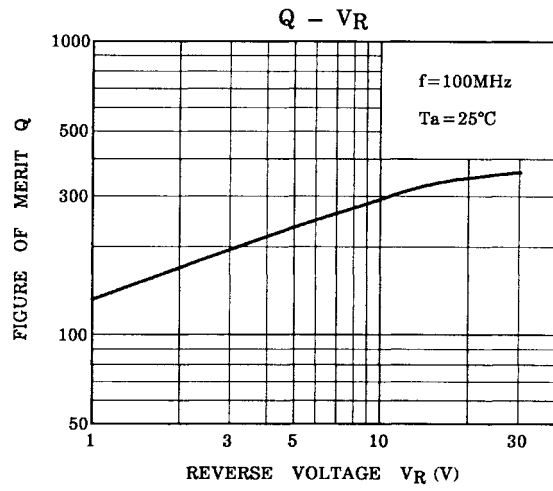
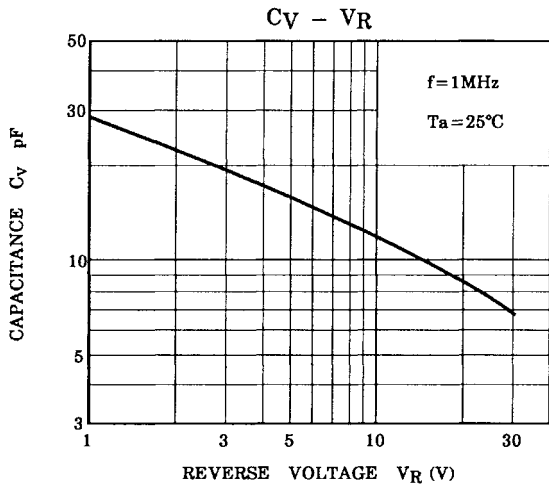
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	$I_R = 10 \mu A$	32	—	—	V
Reverse current	I_R	$V_R = 30 V$	—	—	50	nA
Capacitance	C_{3V}	$V_R = 3 V, f = 1 MHz$ (Note 1)	18.5	19.7	21	pF
Capacitance	C_{30V}	$V_R = 30 V, f = 1 MHz$ (Note 1)	6.6	7.2	7.7	pF
Capacitance ratio	C_{3V}/C_{30V}	— (Note 1)	2.6	—	2.9	—
Series resistance	r_s	$V_R = 3 V, f = 100 MHz$ (Note 1)	—	0.35	0.5	Ω

Note 1: Characteristics between anode 1 and anode 2

Marking





Note 2:
$$\delta_C = \frac{C(T_a) - C(25)}{C(25)} \times 100 \text{ (\%)}$$

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