

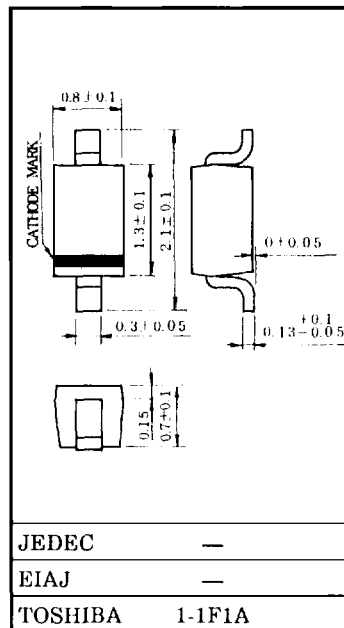
1SV254

SILICON EPITAXIAL PLANAR TYPE VARIABLE CAPACITANCE DIODE

TV TUNING.

- High Capacitance Ratio : $C_{2V} / C_{25V} = 6.5$ (Typ.)
- Low Series Resistance : $r_s = 0.4\Omega$ (Typ.)
- Excellent C-V Characteristics, and Small Tracking Error.
- Useful for Small Size Tuner.

Unit in mm



MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	30	V
Peak Reverse Voltage	V_{RM}	35 (RL=10k Ω)	V
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	-55~125	°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	$I_R = 1\mu A$	30	—	—	V
Reverse Current	I_R	$V_R = 28V$	—	—	10	nA
Capacitance	C_{2V}	$V_R = 2V, f = 1MHz$	14.16	15.0	16.25	pF
Capacitance	C_{25V}	$V_R = 25V, f = 1MHz$	2.11	2.27	2.43	pF
Capacitance Ratio	C_{2V} / C_{25V}	—	5.90	6.50	7.15	
Series Resistance	r_s	$V_R = 5V, f = 470MHz$	—	0.4	0.55	Ω

Note 1 : Units are compounded in one package and are matched to 2.5%.

$$\frac{C(\text{Max.}) - C(\text{Min.})}{C(\text{Min.})} \leq 0.025$$

$$(V_R = 2 \sim 25V)$$

MARKING

