Silicon Epitaxial Planar Type

Variable Capacitance Diode

1SV162

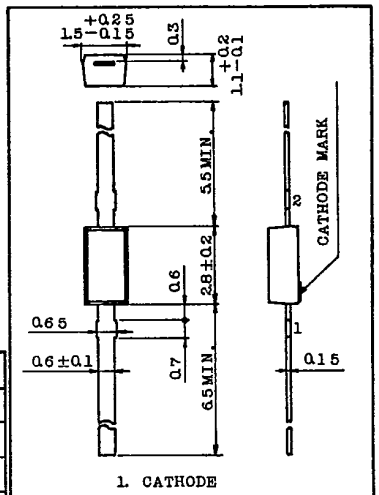
TV TUNER, VHF BAND ELECTRONIC TUNING APPLICATIONS.

FEATURES:

. High Capacitance Ratio : C_{3V}/C_{25V}=5.0 (Min.)

. Low Series Resistance : r_s=0.5Ω (Max.)

Unit in mm



JEDEC	–
EIAJ	–
TOSHIBA	1-2J1A

Weight : 0.02g

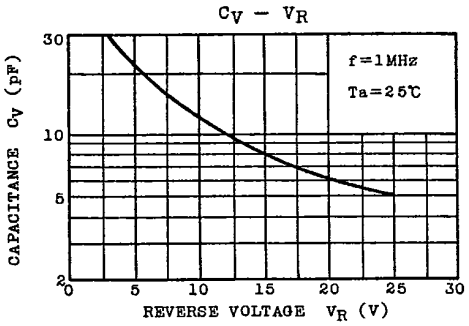
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	28	V
Peak Reverse Voltage	V_{RM}	30	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=1μA	28	–	–	V
Reverse Current	I_R	V_R=28V	–	–	50	nA
Capacitance	C_{3V}	V_R=3V, f=1MHz	26	–	32	pF
Capacitance	C_{25V}	V_R=25V, f=1MHz	4.5	–	6.0	pF
Capacitance Ratio	C_{3V}/C_{25V}		5.0	–	6.5	
Series Resistance	r_s	C=30pF, f=50MHz	–	–	0.5	Ω

Note : Available in matched group for capacitance to 3.0%.

$$\frac{C(Max.) - C(Min.)}{C(Min.)} \leq 0.03$$

(V_R=3V ~ 25V)