

TOSHIBA

Discrete Semiconductors

1SV257

Variable Capacitance Diode

Silicon Epitaxial Planar Type

VCO For UHF Ratio

Features

- Ultra Low Series Resistance : $r_s = 0.2\Omega$ (Typ.)
- Useful for Small Size Set

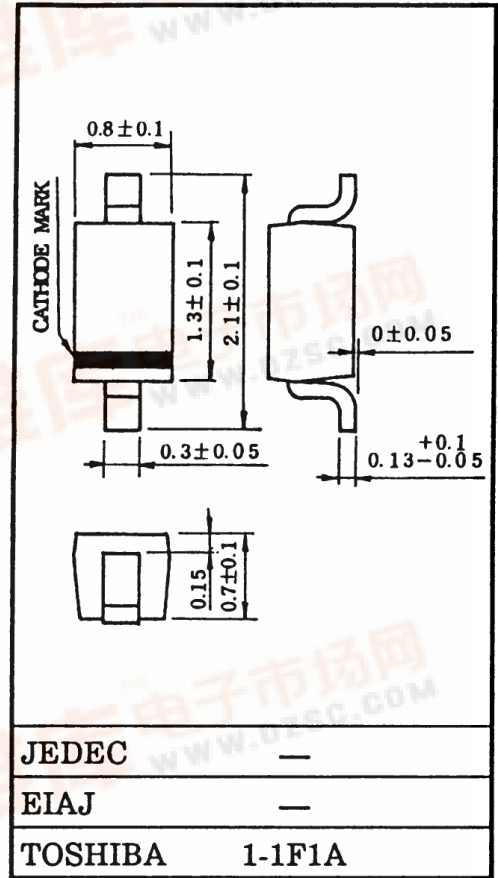
Absolute Maximum Ratings (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	15	V
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	-55 ~ 125	°C

Electrical Characteristics (Ta = 25°C)

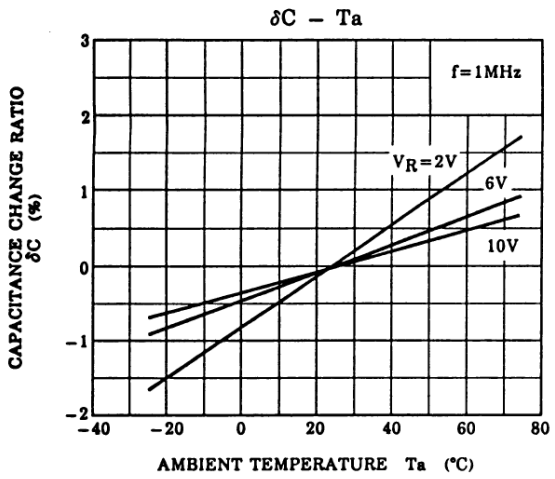
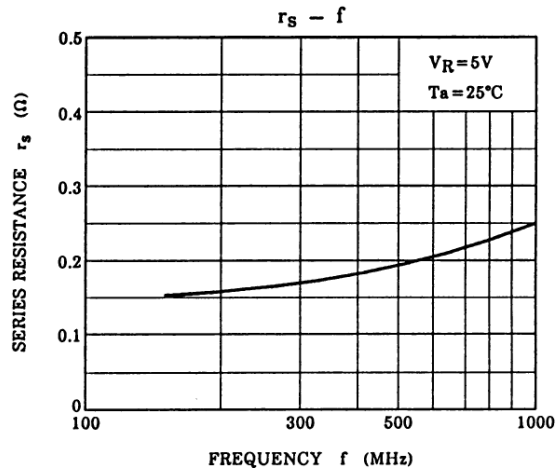
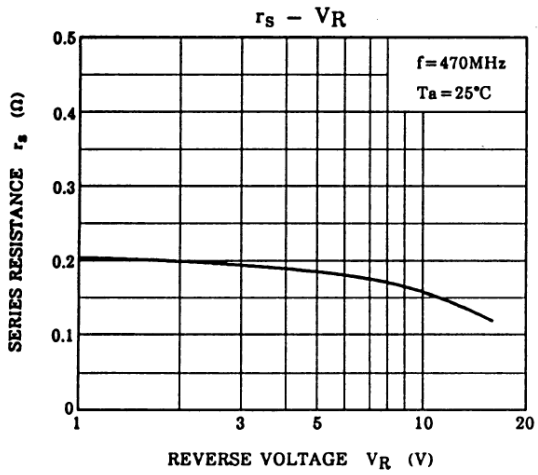
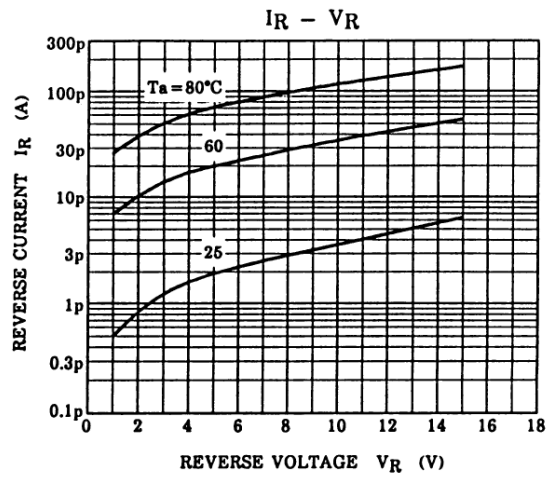
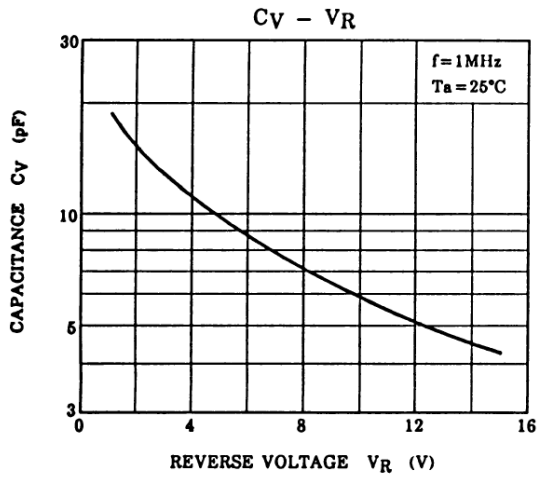
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	$I_R = 1\mu A$	15	-	-	V
Reverse Current	I_R	$V_R = 15V$	-	-	3	nA
Capacitance	C2V	$V_R = 2V, f = 1MHz$	14	15	16	pF
Capacitance	C10V	$V_R = 10V, f = 1MHz$	5.5	6	6.5	pF
Capacitance Ratio	C2V/C10V	-	2.0	2.5	-	-
Series Resistance	r_s	$V_R = 5V, f = 470MHz$	-	0.2	0.4	Ω

Unit in mm



Marking





$$\text{NOTE : } \delta C (\%) = \frac{C(T_a) - C(25)}{C(25)} \times 100$$

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