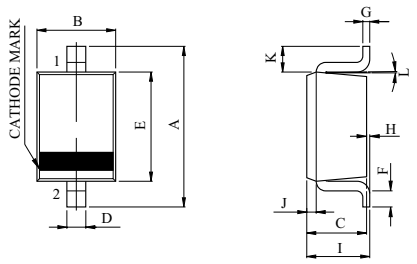
KDV239

VARIABLE CAPACITANCE DIODE
SILICON EPITAXIAL PLANAR DIODE

VCO FOR UHF RADIO.

FEATURES

- Ultra Low Series Resistance : r_S=0.44Ω(Typ.)
- Small Package.



DIM	MILLIMETERS
A	2.50±0.1
B	1.25±0.05
C	0.90±0.05
D	0.30+0.06/-0.04
E	1.70±0.05
F	MIN 0.17
G	0.126±0.03
H	0~0.1
I	1.0 MAX
J	0.15±0.05
K	0.4±0.05
L	2°+4/-2
M	4~6°

1. ANODE
2. CATHODE

USC

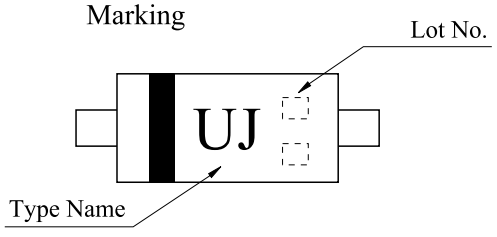
MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	15	V
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

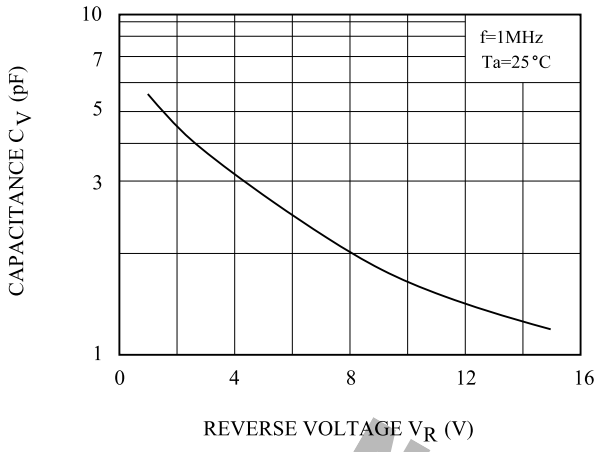
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	I_R=1 μA	15	-	-	V
Reverse Current	I_R	V_R=15V	-	-	3	nA
Capacitance	C_{2V}	V_R=2V, f=1MHz	3.8	4.25	4.7	pF
	C_{10V}	V_R=10V, f=1MHz	1.5	1.75	2.0	
Capacitance Ratio	K	C_{2V}/C_{10V}, f=1MHz	2.0	2.4	-	
Series Resistance	r_S	V_R=1V, f=470MHz	-	0.44	0.6	Ω

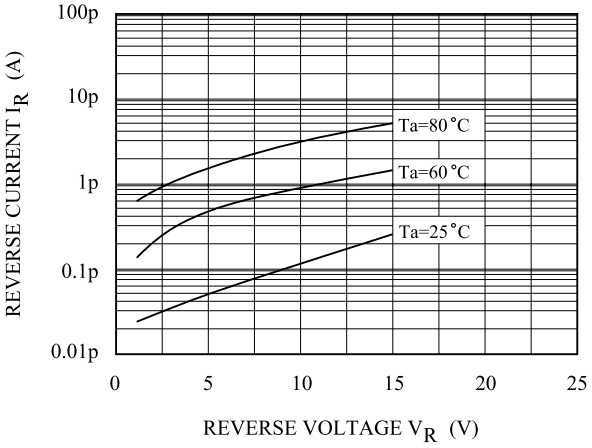
Marking



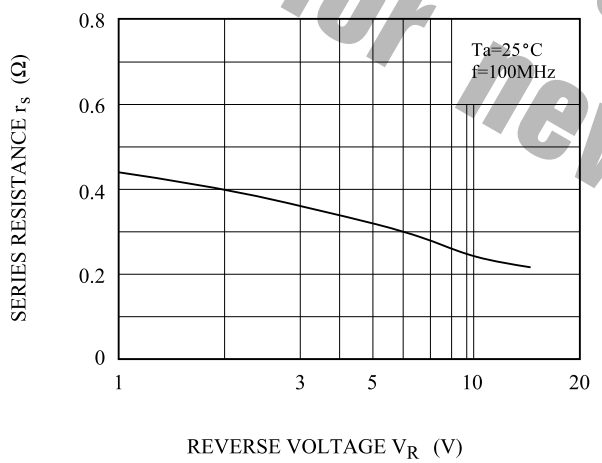
C_V - V_R



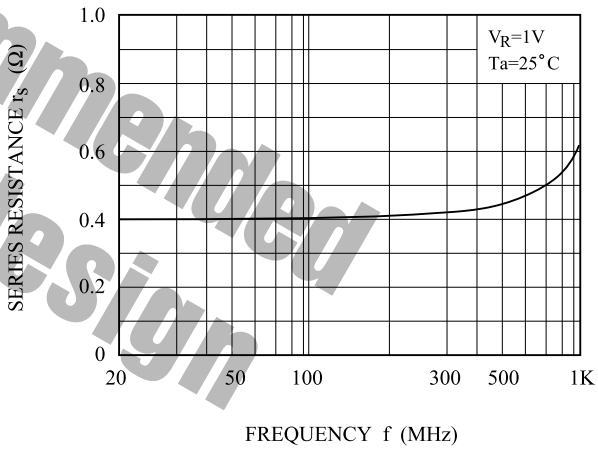
I_R - V_R



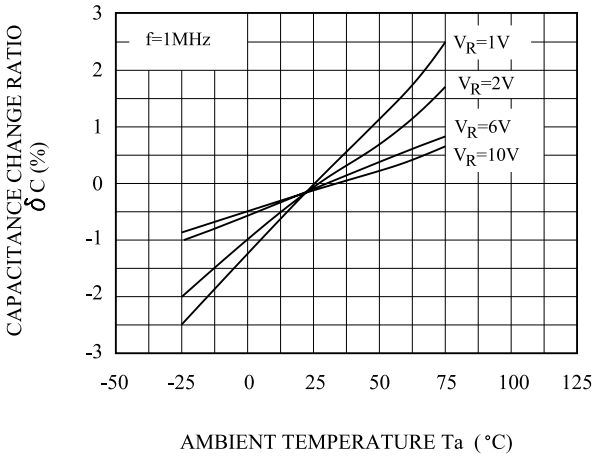
r_s - V_R



r_s - f



δC - Ta



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