

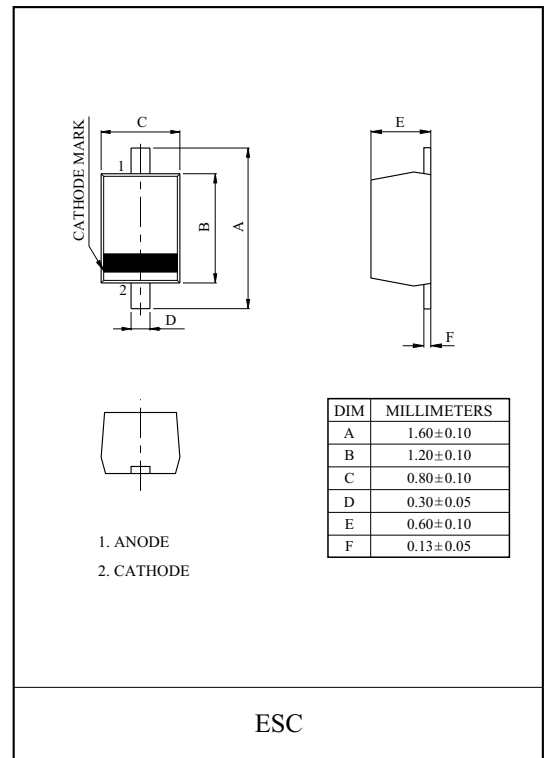
VCO FOR UHF/VHF BAND.

#### FEATURES

- High Capacitance Ratio :  $C_{1V}/C_{4V} = 3.4(\text{Min.})$
- Low Series Resistance
- Excellent Linearity (CV Curve)

#### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	$V_R$	28	V
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C



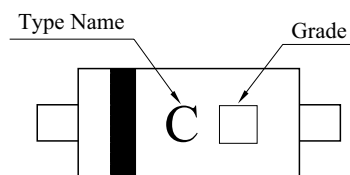
#### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	$V_R$	$I_R=10\mu A$	20	-	-	V
Reverse Current	$I_R$	$V_R=16V$	-	-	5	nA
Capacitance	$C_{1V}$	$V_R=1V, f=1MHz$	15.40	16.60	17.90	pF
	$C_{2V}$	$V_R=2V, f=1MHz$	8.50	10.20	11.90	
	$C_{4V}$	$V_R=4V, f=1MHz$	3.60	4.30	5.05	
Capacitance Ratio	K	$C_{1V}/C_{4V}, f=1MHz$	3.4	-	-	
Series Resistance	$r_s$	$C_1=8pF, f=470MHz$	-	-	0.7	$\Omega$

#### CLASSIFICATION OF CAPACITANCE GRADE

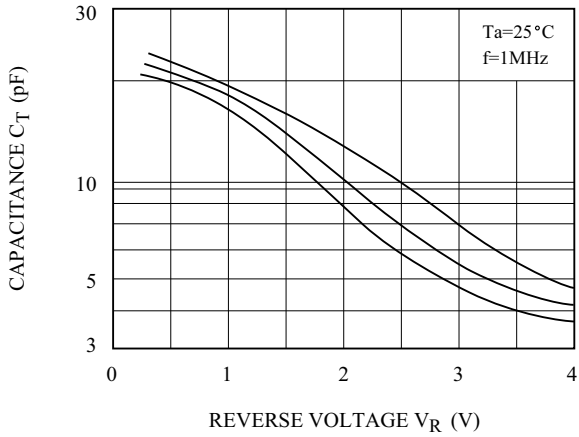
GRADE	CAPACITANCE ( $C_{2V}$ )	UNIT
A	8.5 ~ 9.15	pF
B	9.05 ~ 9.85	pF
C	9.75 ~ 10.65	pF
D	10.55 ~ 11.35	pF
E	11.25 ~ 11.90	pF

#### Marking

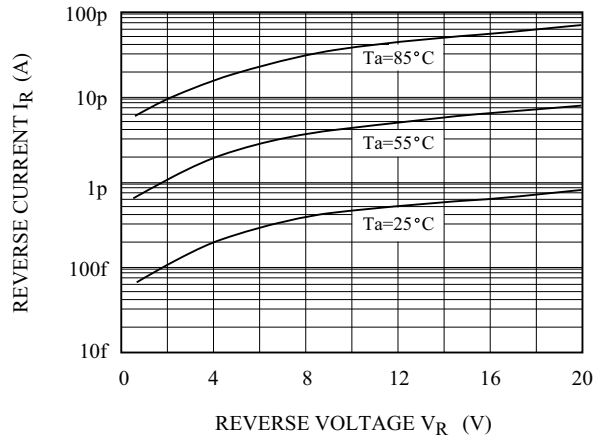


# KDV275E

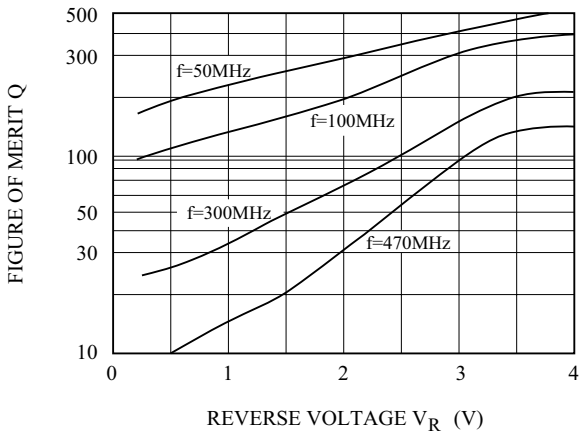
$C_T - V_R$



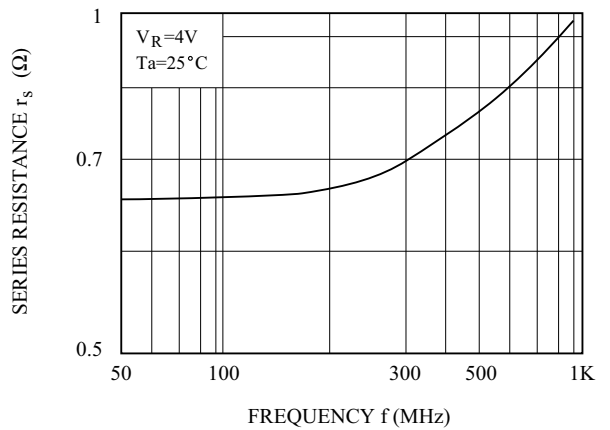
$I_R - V_R$



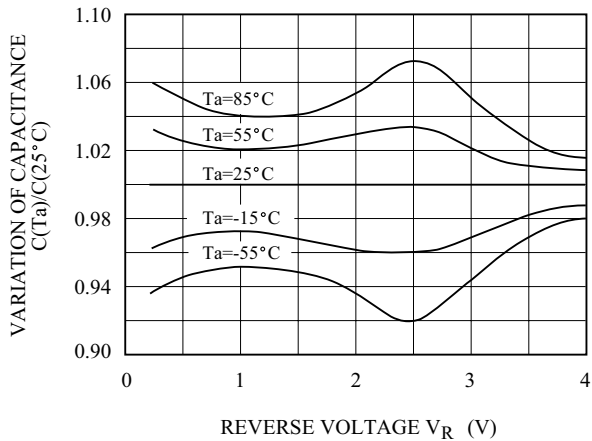
$Q - V_R$



$r_s - f$



$C(T_a)/C(25^\circ\text{C}) - V_R$



$\Delta C/T_a - V_R$

