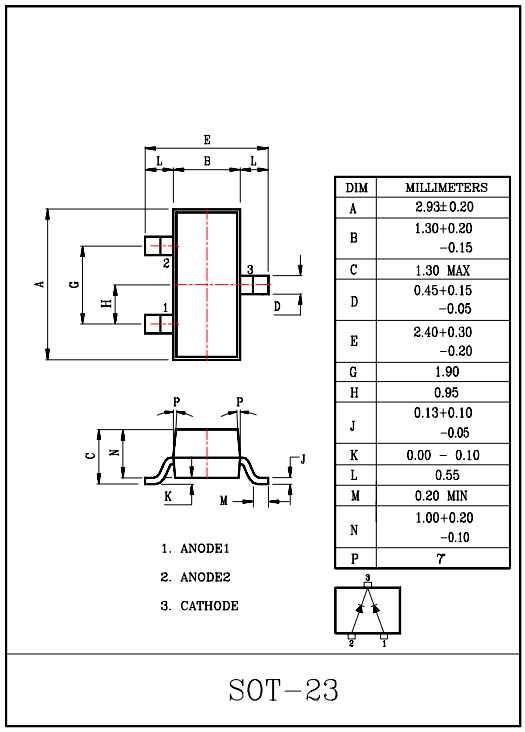
KDV1430

VARIABLE CAPACITANCE DIODE
SILICON EPITAXIAL PLANAR DIODE

FM RADIO BAND TUNING APPLICATION.

FEATURES

- High Capacitance Ratio : C_{2V}/C_{9V}=3.7~5.0
- Low r_S : r_S=0.5Ω (Max.).
- Small Package.



DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20 −0.15
C	1.30 MAX
D	0.45+0.15 −0.05
E	2.40+0.30 −0.20
G	1.90
H	0.95
J	0.13+0.10 −0.05
K	0.00 ~ 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20 −0.10
P	7°

SOT-23

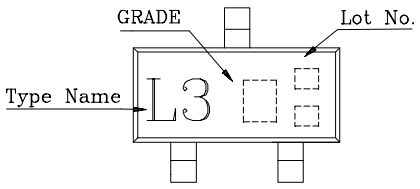
MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	18	V
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55~150	℃

CLASSPICATION OF CAPACITANCE GRADE

GRADE	CAPACITANCE (C_{2V})	UNIT
A	69.14~71.23	pF
B	71.09~73.24	
C	73.09~75.31	
D	75.15~77.43	

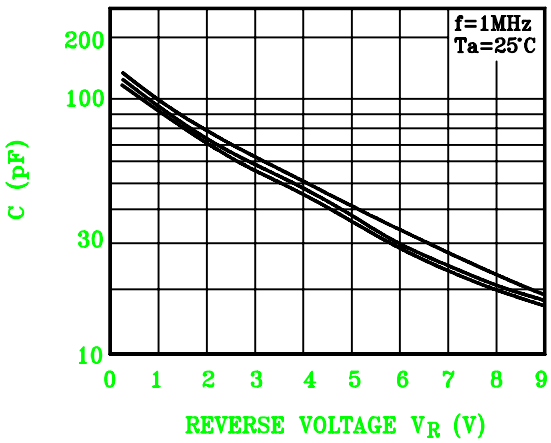
Marking



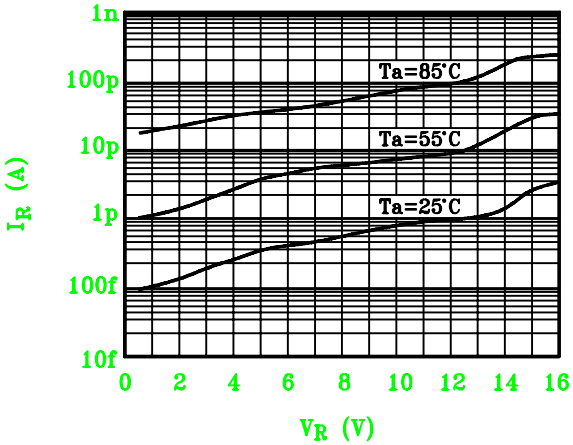
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	I_R=10μA	16	-	-	V
Reverse Current	I_R	V_R=10V	-	-	100	nA
Capacitance	C_{2V}	V_R=2V, f=1MHz	69.14	-	77.43	pF
	C_{4V}	V_R=4V, f=1MHz	43.09	-	56.24	
	C_{6V}	V_R=6V, f=1MHz	25.05	-	34.57	
	C_{9V}	V_R=9V, f=1MHz	15.44	-	20.1	
Capacitance Ratio	K	C_{2V}/C_{9V}, f=1MHz	3.7	-	5.0	
Series Resistance	r_S	V_R=2V, f=70MHz	-	-	0.5	Ω

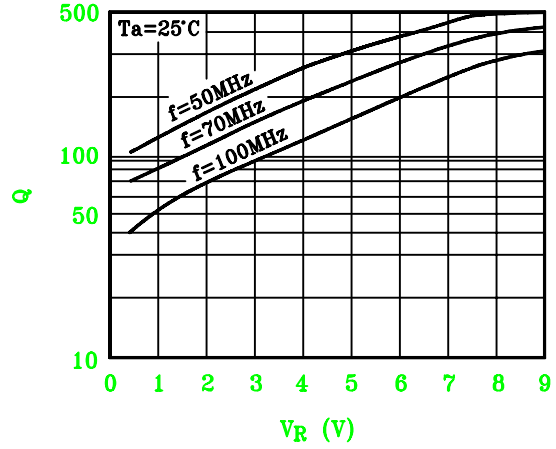
C – V_R



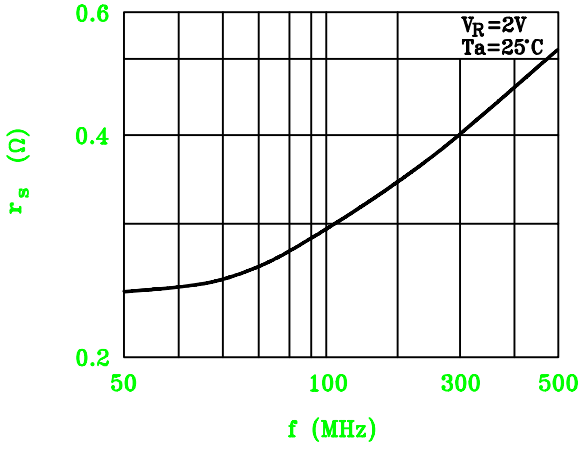
I_R – V_R



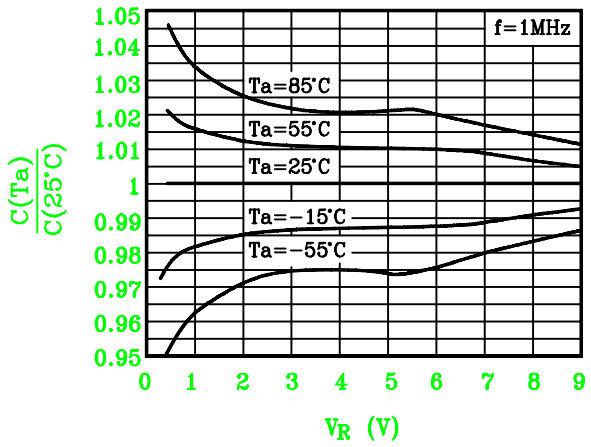
Q – V_R



f – r_s



V_R – $\frac{C(Ta)}{C(25°C)}$



V_R – (ppm/°C)

