KDV152S

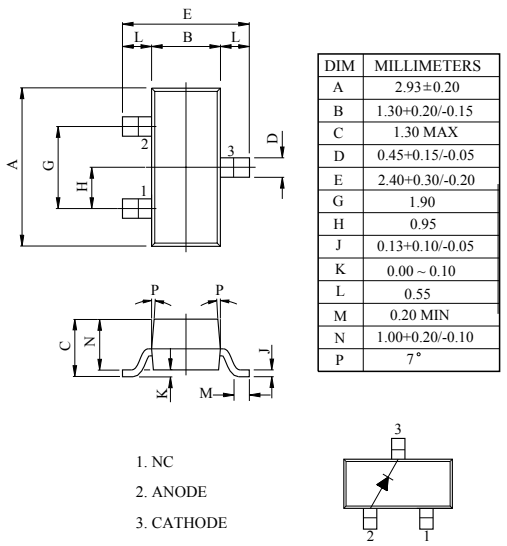
VARIABLE CAPACITANCE DIODE
SILICON EPITAXIAL PLANAR DIODE

VCO for CB, C/P PLL APPLICATION.

FEATURES

· Low Series Resistance : r_S=0.3(Typ.).

· Small Package.



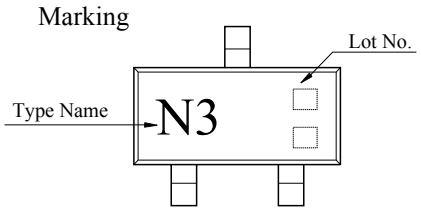
DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/-0.15
C	1.30 MAX
D	0.45+0.15/-0.05
E	2.40+0.30/-0.20
G	1.90
H	0.95
J	0.13+0.10/-0.05
K	0.00 ~ 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/-0.10
P	7°

SOT-23

MAXIMUM RATING (Ta=25℃)

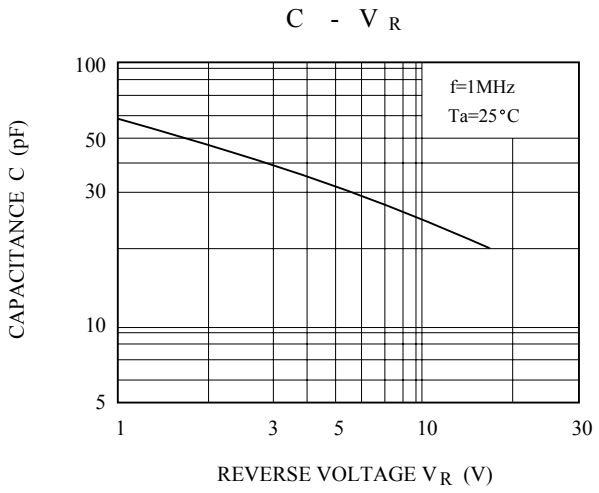
CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	15	V
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

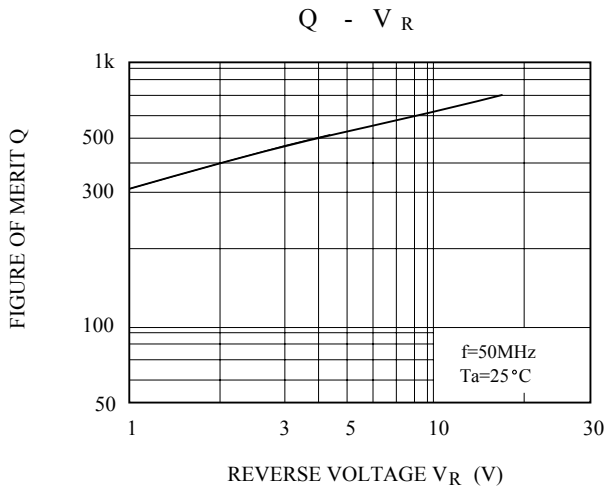
Marking



ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	I_R=10μA	15	-	-	V
Reverse Current	I_R	V_R=15V	-	-	50	nA
Capacitance	C_{2V}	V_R=2V, f=1MHz	42	-	47.5	pF
	C_{8V}	V_R=8V, f=1MHz	24	-	28.8	
Capacitance Ratio	C_{2V}/C_{8V}		1.60	-	1.8	
Series Resistance	r_S	C=38pF, f=100MHz	-	0.3	0.4	Ω


C - V R
f=1MHz
Ta=25°C
CAPACITANCE C (pF)
100
50
30
10
5
1
3
5
10
30
REVERSE VOLTAGE V R (V)


Q - V R
f=50MHz
Ta=25°C
FIGURE OF MERIT Q
1k
500
300
100
50
1
3
5
10
30
REVERSE VOLTAGE V R (V)