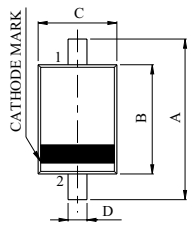
KDV310E

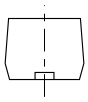
VARIABLE CAPACITANCE DIODE
SILICON EPITAXIAL PLANAR DIODE

TV Tuning.

FEATURES

- High Capacitance Ratio : C_{2V}/C_{25V}=17.0(Min.)
- Low Series Resistance : r_s=1.1 Ω (Max.)
- Small Package : ESC.





DIM	MILLIMETERS
A	1.60±0.10
B	1.20±0.10
C	0.80±0.10
D	0.30±0.05
E	0.60±0.10
F	0.13±0.05

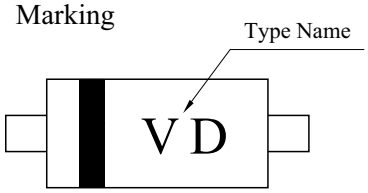
1. ANODE
2. CATHODE

ESC

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	34	V
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

Marking



ELECTRICAL CHARACTERISTICS (Ta=25℃)

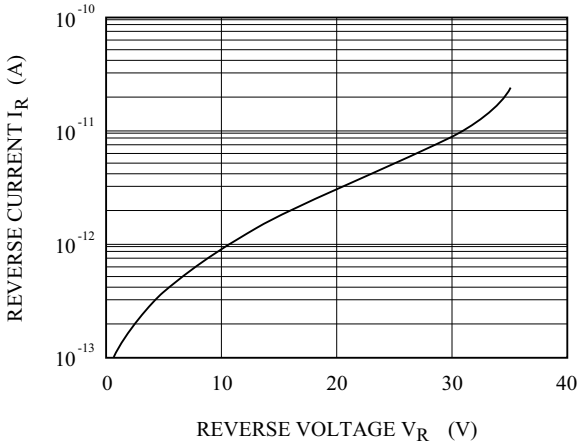
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Current	I_{R1}	V_R=32V	-	-	10	nA
	I_{R2}	V_R=32V, Ta=60℃	-	-	100	
Capacitance	C_{2V}	V_R=2V, f=1MHz	47.0	-	53.0	pF
	C_{25V}	V_R=25V, f=1MHz	2.65	-	3.0	
Capacitance Ratio	C_{2V}/C_{25V}	-	17.0	-	-	
Series Resistance	r_S	V_R=5V, f=470MHz	-	-	1.1	Ω

Note : Available in matched group for capacitance to 2.0%.

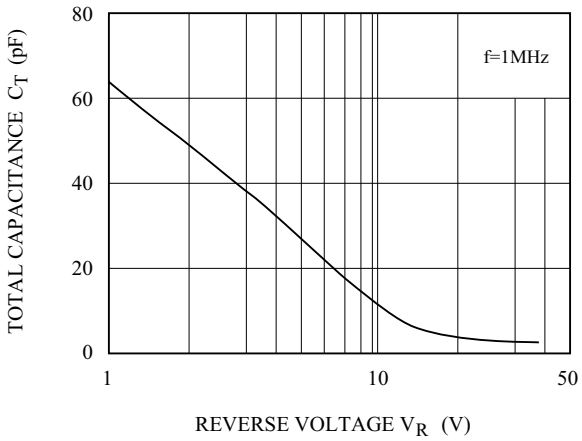
$$\frac{C(Max.)-C(Min.)}{C(Min.)} \leqq 0.02$$

(V_R=2~25V)

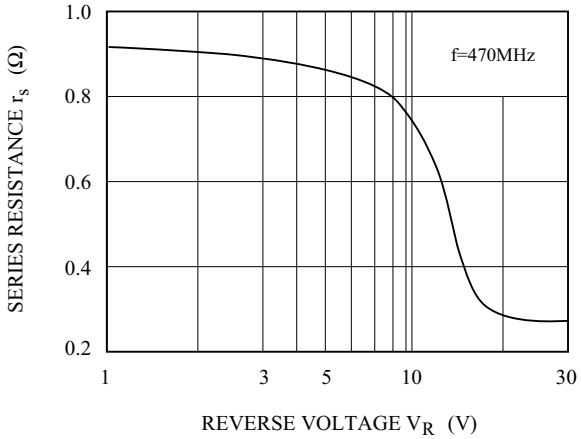
I_R - V_R



C_T - V_R



r_s - V_R



$\Delta(LOG\ C_T) / \Delta(LOG\ V_R)$ - V_R