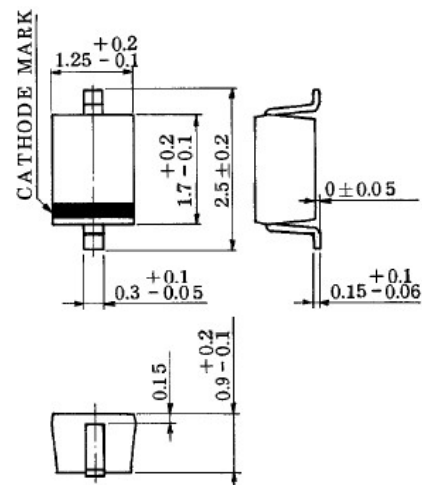


## VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

VCO FOR UHF BAND RADIO



$$r_s = 0.2 \Omega \text{ (Typ.)}$$



Weight : 0.004g

Unit in mm

### MAXIMUM RATINGS (Ta = 25°C)

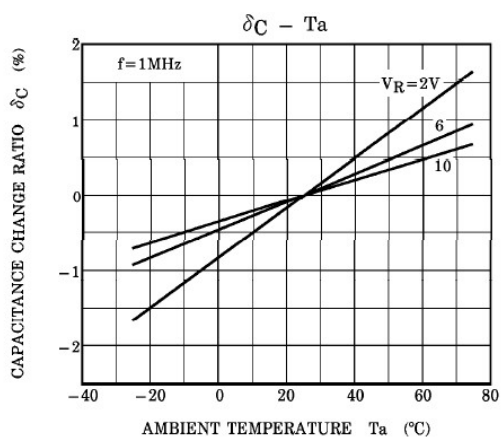
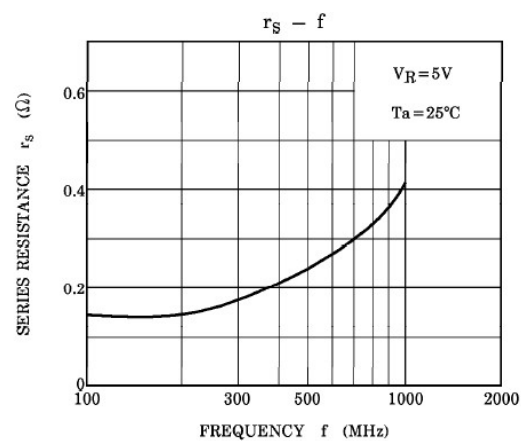
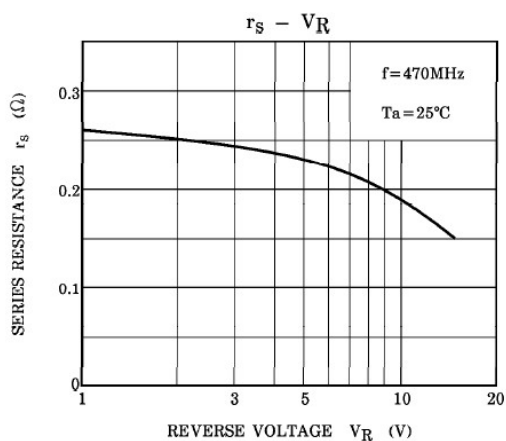
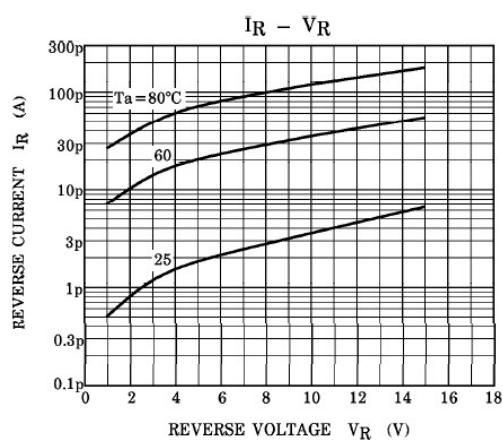
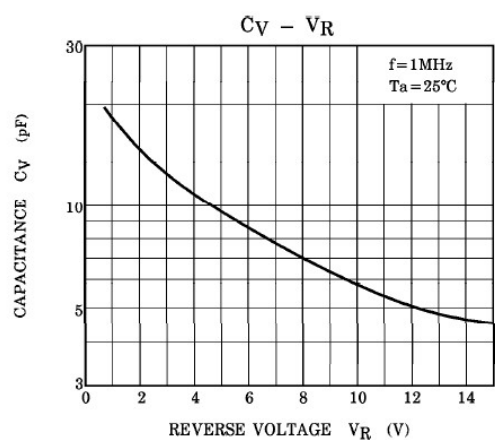
| CHARACTERISTIC            | SYMBOL    | RATING  | UNIT |
|---------------------------|-----------|---------|------|
| Reverse Voltage           | $V_R$     | 15      | V    |
| Junction Temperature      | $T_j$     | 125     | °C   |
| Storage Temperature Range | $T_{stg}$ | -55~125 | °C   |

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

| CHARACTERISTIC    | SYMBOL             | TEST CONDITION         | MIN. | TYP. | MAX. | UNIT     |
|-------------------|--------------------|------------------------|------|------|------|----------|
| Reverse Voltage   | $V_R$              | $I_R = 1 \mu A$        | 15   | —    | —    | V        |
| Reverse Current   | $I_R$              | $V_R = 15V$            | —    | —    | 5    | nA       |
| Capacitance       | $C_{2V}$           | $V_R = 2V, f = 1MHz$   | 14   | 15   | 16   | pF       |
| Capacitance       | $C_{10V}$          | $V_R = 10V, f = 1MHz$  | 5.5  | 6    | 6.5  | pF       |
| Capacitance Ratio | $C_{2V} / C_{10V}$ | —                      | 2.0  | 2.5  | —    | —        |
| Series Resistance | $r_s$              | $V_R = 5V, f = 470MHz$ | —    | 0.2  | 0.4  | $\Omega$ |



# 1SV229



NOTE :  $\delta C (\%) = \frac{C(T_a) - C(25^\circ\text{C})}{C(25^\circ\text{C})} \times 100$