

TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

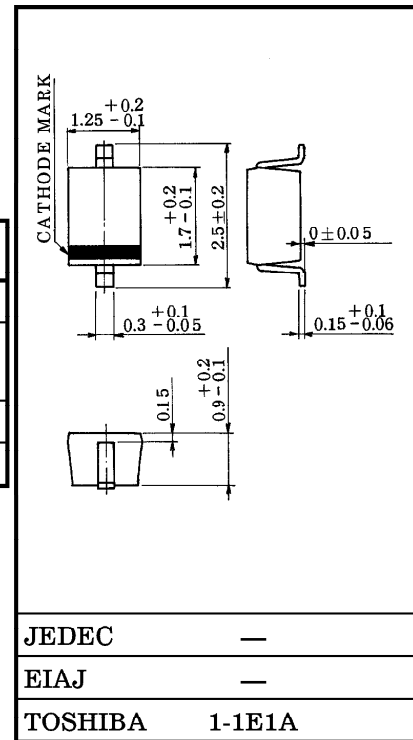
# 1SV216

TV VHF UHF TUNER AFC

Unit in mm

**MAXIMUM RATINGS (Ta = 25°C)**

| CHARACTERISTIC            | SYMBOL    | RATING                      | UNIT |
|---------------------------|-----------|-----------------------------|------|
| Reverse Voltage           | $V_R$     | 30                          | V    |
| Peak Reverse Voltage      | $V_{RM}$  | 35<br>( $R_L = 10k\Omega$ ) | V    |
| Junction Temperature      | $T_j$     | 125                         | °C   |
| Storage Temperature Range | $T_{stg}$ | -55~125                     | °C   |



Weight : 0.004g

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

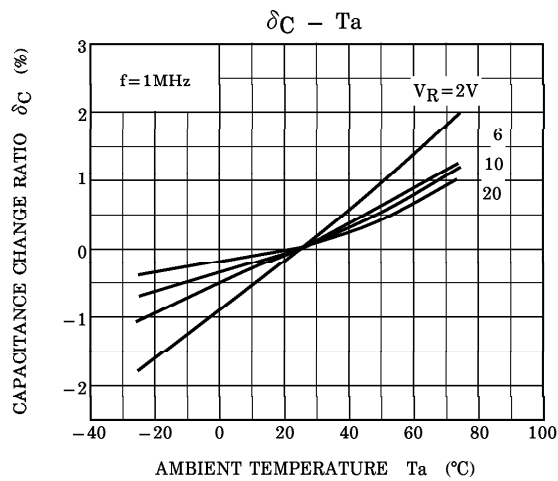
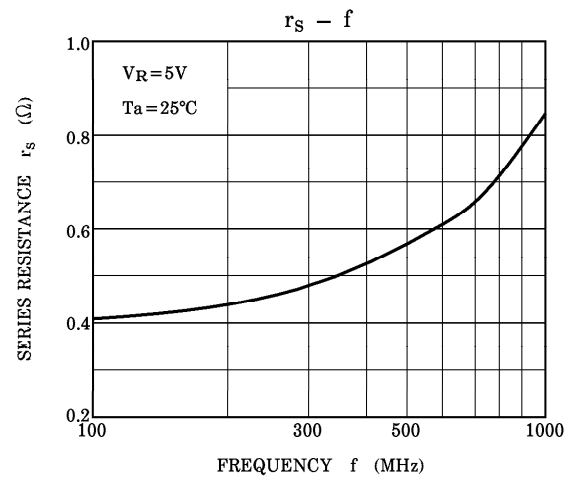
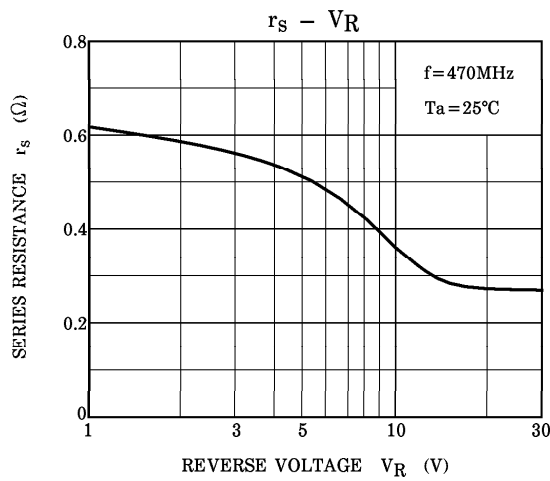
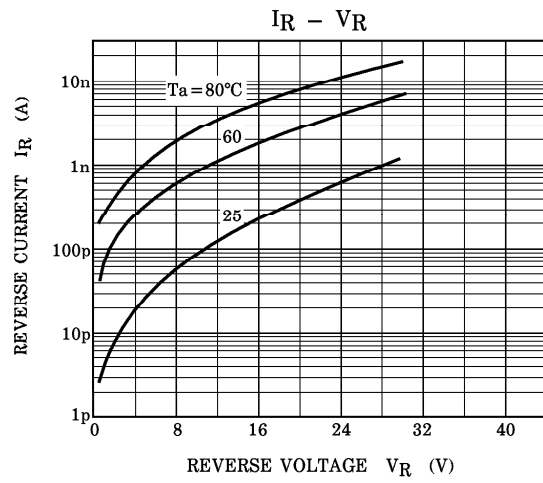
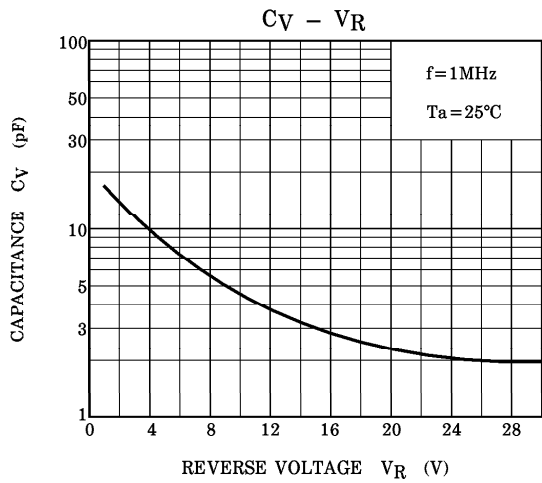
| CHARACTERISTIC    | SYMBOL             | TEST CONDITION         | MIN. | TYP. | MAX. | UNIT     |
|-------------------|--------------------|------------------------|------|------|------|----------|
| Reverse Voltage   | $V_R$              | $I_R = 1\mu A$         | 30   | —    | —    | V        |
| Reverse Current   | $I_R$              | $V_R = 28V$            | —    | —    | 10   | nA       |
| Capacitance       | $C_{2V}$           | $V_R = 2V, f = 1MHz$   | 10.5 | —    | 16   | pF       |
| Capacitance       | $C_{10V}$          | $V_R = 10V, f = 1MHz$  | 3.3  | —    | 5.7  | pF       |
| Capacitance Ratio | $C_{2V} / C_{10V}$ | —                      | 2.5  | —    | 3.4  | —        |
| Series Resistance | $r_s$              | $V_R = 5V, f = 470MHz$ | —    | 0.55 | 1.2  | $\Omega$ |

**Marking**



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