

# MA27V07

## Silicon epitaxial planar type

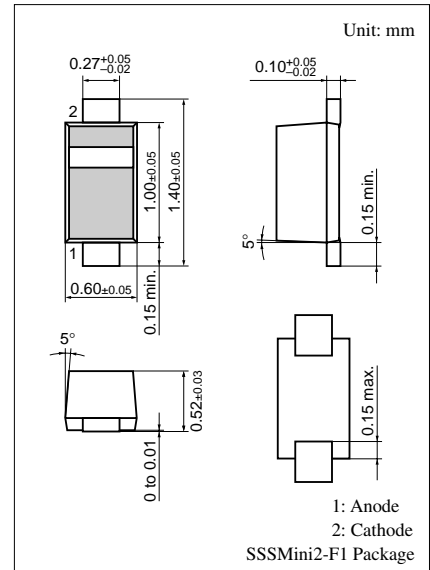
For VCO

### ■ Features

- Good linearity and large capacitance-ratio in  $C_D - V_R$  relation
- High frequency type by this low capacitance
- SSS-Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter            | Symbol    | Rating      | Unit             |
|----------------------|-----------|-------------|------------------|
| Reverse voltage (DC) | $V_R$     | 6           | V                |
| Junction temperature | $T_j$     | 125         | $^\circ\text{C}$ |
| Storage temperature  | $T_{stg}$ | -55 to +125 | $^\circ\text{C}$ |



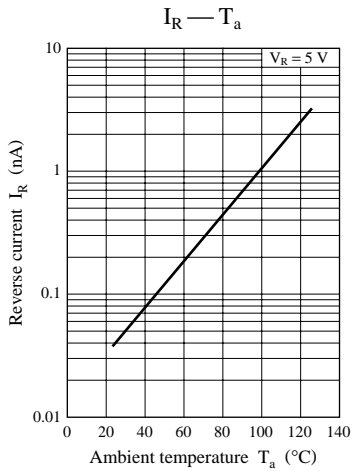
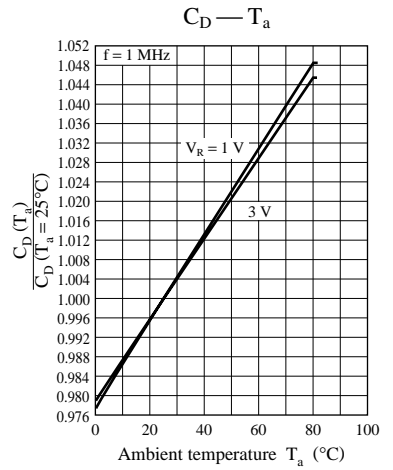
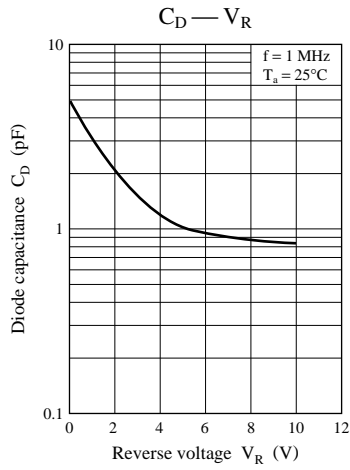
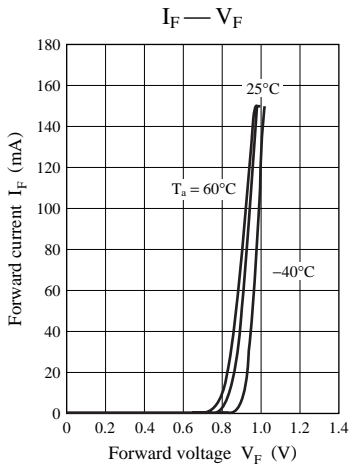
Marking Symbol: 7

### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter            | Symbol                | Conditions                             | Min  | Typ | Max  | Unit     |
|----------------------|-----------------------|--|------|-----|------|----------|
| Reverse current (DC) | $I_R$                 | $V_R = 5\text{ V}$                     |      |     | 10   | nA       |
| Diode capacitance    | $C_{D(1V)}$           | $V_R = 1\text{ V}, f = 1\text{ MHz}$   | 2.88 |     | 3.12 | pF       |
|                      | $C_{D(3V)}$           | $V_R = 3\text{ V}, f = 1\text{ MHz}$   | 1.49 |     | 1.62 |          |
| Capacitance ratio    | $C_{D(1V)}/C_{D(3V)}$ |  | 1.84 |     | 2.02 | —        |
| Series resistance *  | $r_D$                 | $V_R = 3\text{ V}, f = 470\text{ MHz}$ |      |     | 0.35 | $\Omega$ |

Note) 1. Rated input/output frequency: 470 MHz

2. \*: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER



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