

# MA329

## Silicon epitaxial planer type

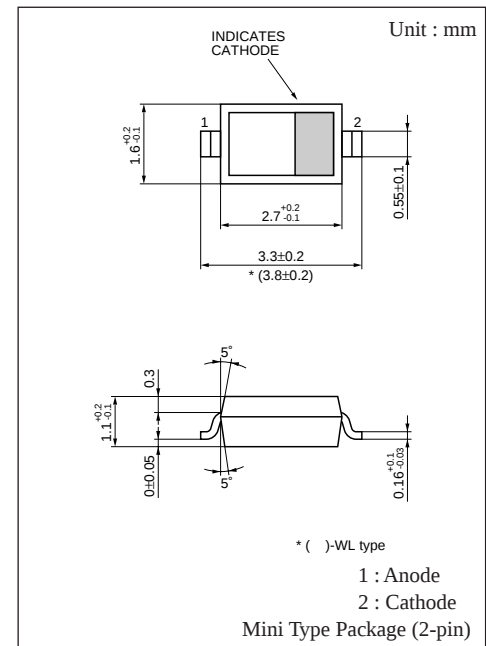
For VHF tuner

### ■ Features

- Large capacity variation ratio
- Small series resistance  $r_D$
- Mini package, enabling down-sizing of the equipment and automatic insertion through taping

### ■ Absolute Maximum Ratings (Ta= 25°C)

| Parameter            | Symbol    | Rating        | Unit |
|----------------------|-----------|---------------|------|
| Reverse voltage (DC) | $V_R$     | 32            | V    |
| Peak reverse voltage | $V_{RM}$  | 34            | V    |
| Forward current (DC) | $I_F$     | 20            | mA   |
| Junction temperature | $T_j$     | 150           | °C   |
| Storage temperature  | $T_{stg}$ | - 55 to + 150 | °C   |



Marking Symbol : 6B

### ■ Electrical Characteristics (Ta= 25°C)

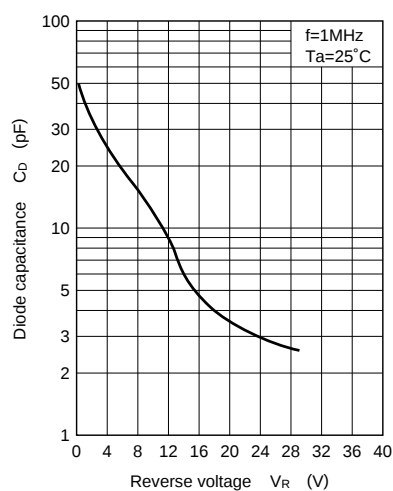
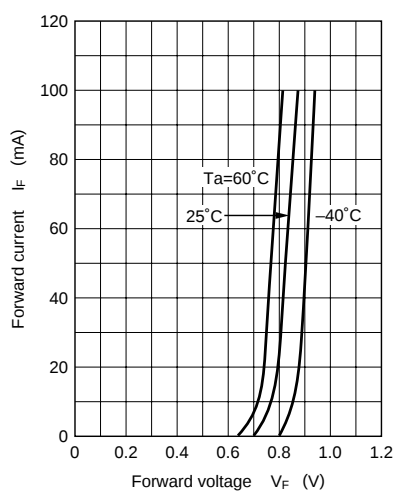
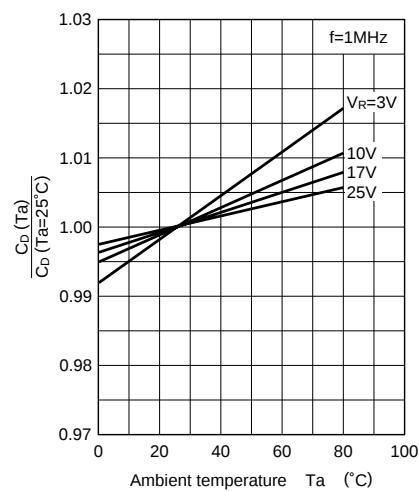
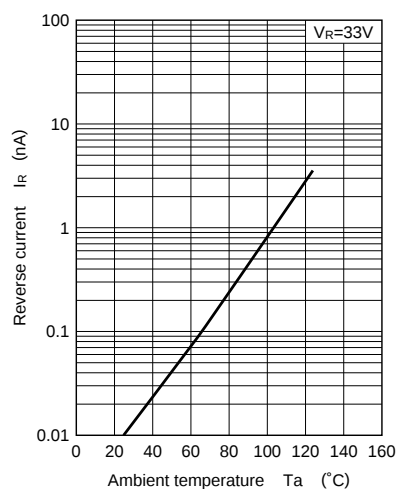
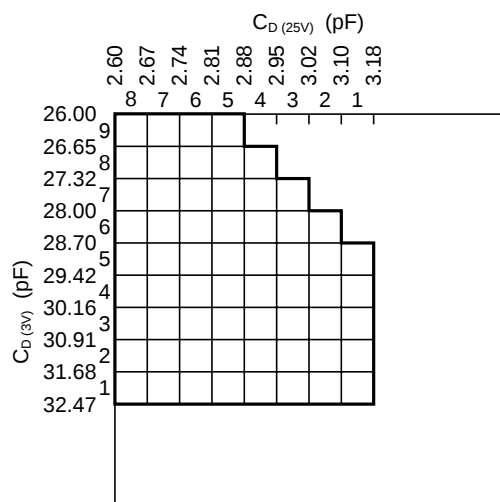
| Parameter                   | Symbol                 | Condition                     | min   | typ | max   | Unit     |
|-----------------------------|------------------------|-------------------------------|-------|-----|-------|----------|
| Reverse current (DC)        | $I_R$                  | $V_R = 30V$                   |       |     | 10    | nA       |
| Diode capacitance           | $C_{D(1V)}$            | $V_R = 1V, f = 1MHz$          |       | 42  |       | pF       |
|                             | $C_{D(3V)}$            | $V_R = 3V, f = 1MHz$          | 25.87 |     | 32.64 | pF       |
|                             | $C_{D(25V)}$           | $V_R = 25V, f = 1MHz$         | 2.58  |     | 3.20  | pF       |
|                             | $C_{D(10V)}$           | $V_R = 10V, f = 1MHz$         | 9.15  |     | 12.44 | pF       |
|                             | $C_{D(17V)}$           | $V_R = 17V, f = 1MHz$         | 3.28  |     | 4.46  | pF       |
| Capacitance ratio           | $C_{D(3V)}/C_{D(25V)}$ |                               | 9     |     |       | —        |
| Diode capacitance deviation | $\Delta C$             | $C_{D(3V)} (10V) (17V) (25V)$ |       |     | 3     | %        |
| Series resistance           | $r_D^*$                | $C_D = 9pF, f = 470MHz$       |       |     | 1.6   | $\Omega$ |

Note 1. Rated input/output frequency : 470MHz

2. \*  $r_D$  measurement device : YHP MODEL 4191A RF IMPEDANCE ANALYZER

### ■ Marking



$C_D - V_R$  $I_F - V_F$  $C_D - T_a$  $I_R - T_a$  **$C_D$  rank classification****Primary rank classification****Secondary rank classification**