

# MA365

## Silicon epitaxial planer type

For CATV tuner

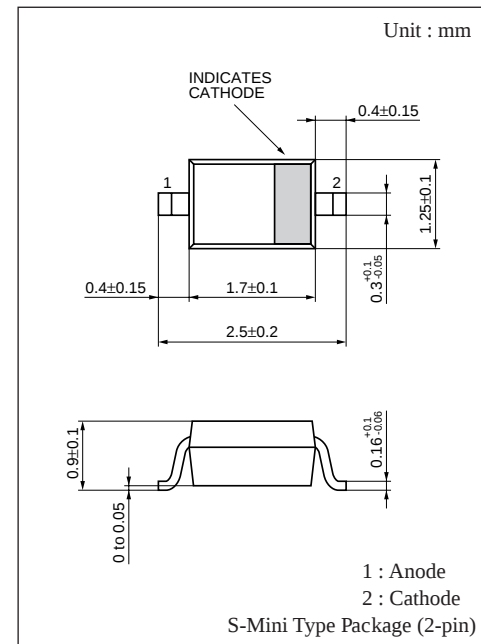
### ■ Features

- Capacity change ratio largest at 14
- S-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 | $V_{RM}^*$ | 35           | V    |
| Forward current (DC) | $I_F$      | 20           | mA   |
| Junction temperature | $T_j$      | 150          | °C   |
| Storage temperature  | $T_{stg}$  | – 55 to +150 | °C   |

\*  $R_L=10k\Omega$



Marking Symbol : 6F

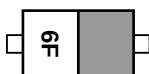
### ■ Electrical Characteristics (Ta= 25°C)

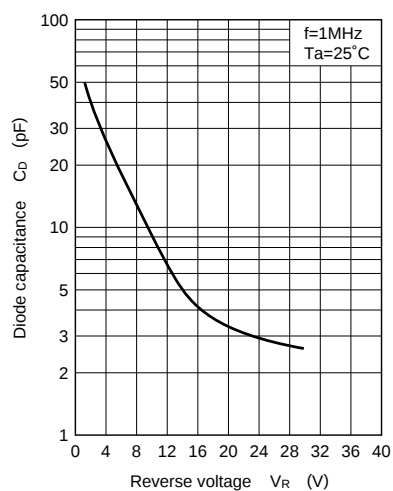
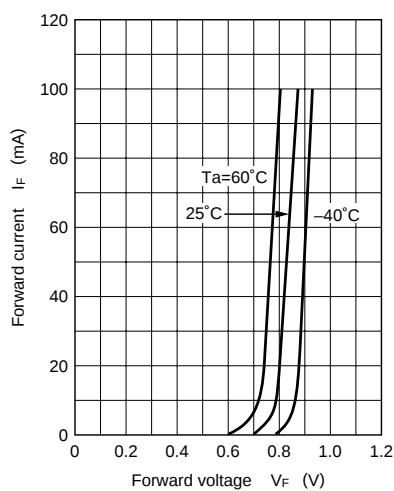
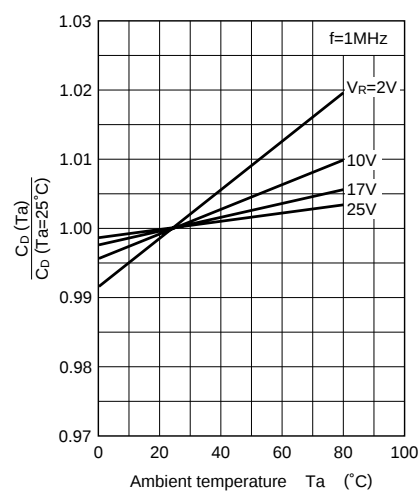
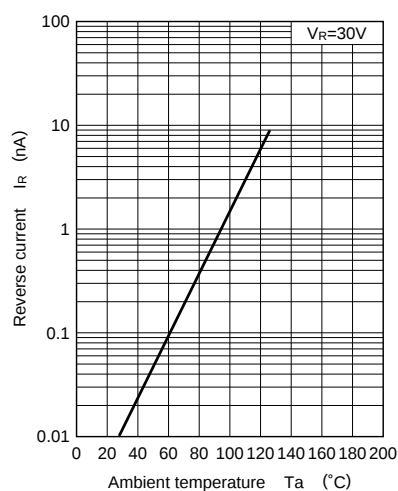
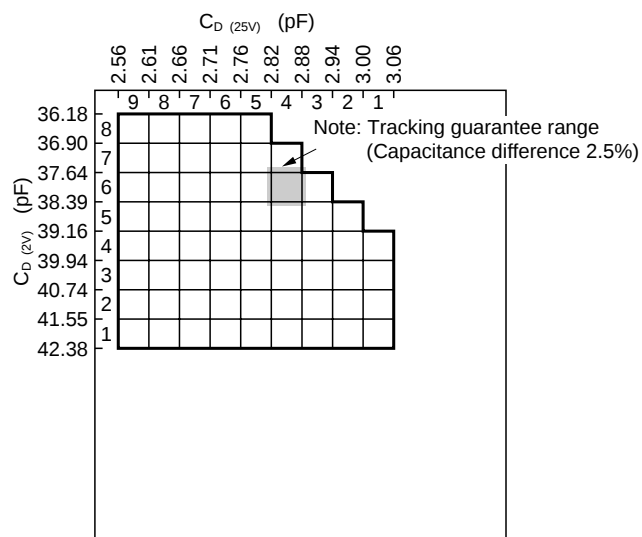
| Parameter                   | Symbol                 | Condition                    | min   | typ | max   | Unit     |
|-----------------------------|------------------------|------------------------------|-------|-----|-------|----------|
| Reverse current (DC)        | $I_R$                  | $V_R= 30V$                   |       |     | 10    | nA       |
| Diode capacitance           | $C_{D(2V)}$            | $V_R= 2V, f= 1MHz$           | 36.00 |     | 42.59 | pF       |
|                             | $C_{D(25V)}$           | $V_R= 25V, f= 1MHz$          | 2.54  |     | 3.08  | pF       |
|                             | $C_{D(10V)}$           | $V_R= 10V, f= 1MHz$          | 8.00  |     | 11.31 | pF       |
|                             | $C_{D(17V)}$           | $V_R= 17V, f= 1MHz$          | 3.40  |     | 4.63  | pF       |
| Capacitance ratio           | $C_{D(2V)}/C_{D(25V)}$ |                              | 13    | 14  |       | —        |
| Diode capacitance deviation | $\Delta C$             | $C_D (2V) (10V) (17V) (25V)$ |       |     | 2.5   | %        |
| Series resistance           | $r_D^{*1}$             | $C_D= 9pF, f= 470MHz$        |       |     | 0.85  | $\Omega$ |

Note 1. Rated input/output frequency : 470MHz

2. \*1 :  $r_D$  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**