

# MA333

N type GaAS epitaxial planer type

For wireless equipment VCO,

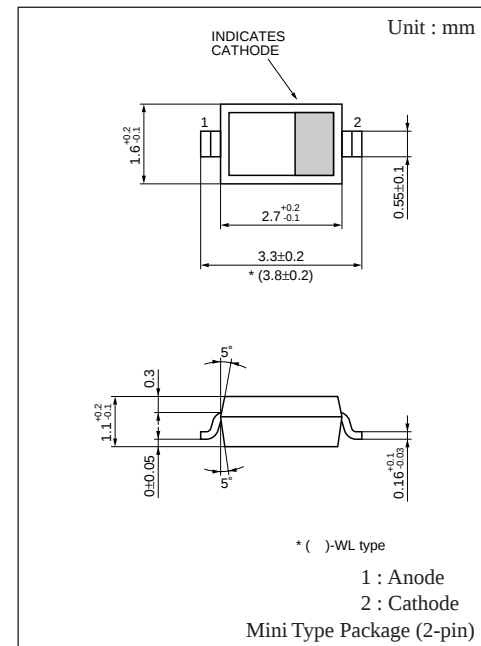
For electronic tuning of UHF and VHF TV tuner

## ■ Features

- Low series resistance  $r_D$  and high Q value
- Large capacity change ratio during low-voltage operation

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

| Parameter            | Symbol    | Rating        | Unit |
|----------------------|-----------|---------------|------|
| Reverse voltage (DC) | $V_R$     | 9             | V    |
| Forward current (DC) | $I_F$     | 100           | mA   |
| Junction temperature | $T_j$     | 125           | °C   |
| Storage temperature  | $T_{stg}$ | - 55 to + 125 | °C   |



Marking Symbol : 6C

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

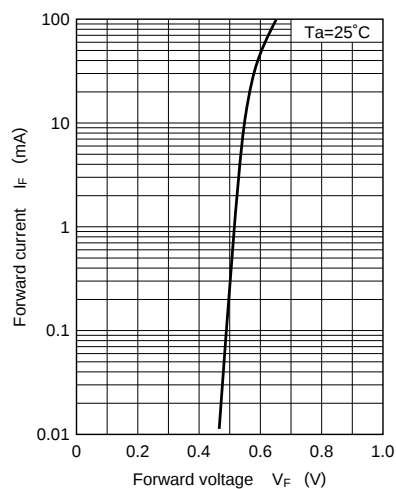
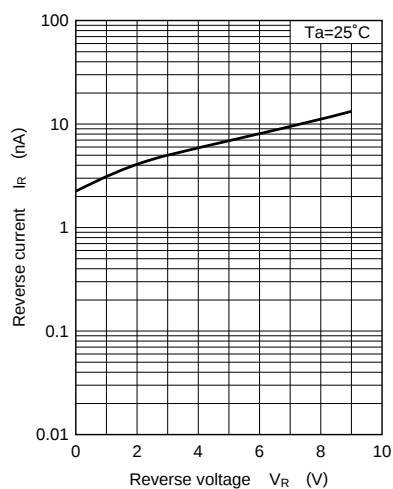
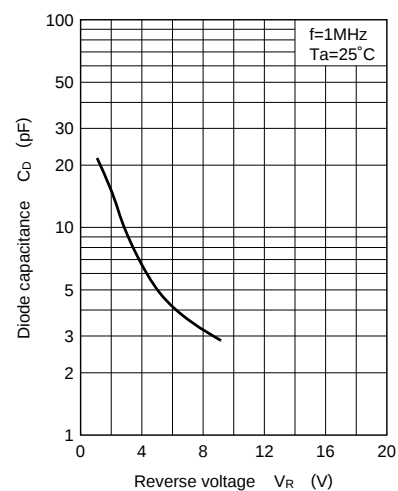
| Parameter            | Symbol      | Condition               | min  | typ  | max  | Unit     |
|----------------------|-------------|-------------------------|------|------|------|----------|
| Reverse current (DC) | $I_R$       | $V_R = 6V$              |      |      | 100  | nA       |
| Reverse voltage (DC) | $V_R$       | $I_R = 1\mu A$          | 9    |      |      | V        |
| Diode capacitance    | $C_{D(2V)}$ | $V_R = 2V, f = 1MHz$    | 13.5 | 15.5 | 17.0 | pF       |
|                      | $C_{D(4V)}$ | $V_R = 4V, f = 1MHz$    | 4.0  | 6.8  | 7.5  | pF       |
|                      | $C_{D(6V)}$ | $V_R = 6V, f = 1MHz$    | 2.8  | 4.0  | 4.5  | pF       |
| Series resistance    | $r_D^*$     | $C_D = 9pF, f = 470MHz$ |      | 0.25 | 0.35 | $\Omega$ |

Note 1. Rated input/output frequency : 470MHz

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

## ■ Marking



$I_F - V_F$  $I_R - V_R$  $C_D - V_R$  $C_D - T_a$ 