

MA2X333 (MA333)

N type GaAs epitaxial planar type

For VCO of a radio

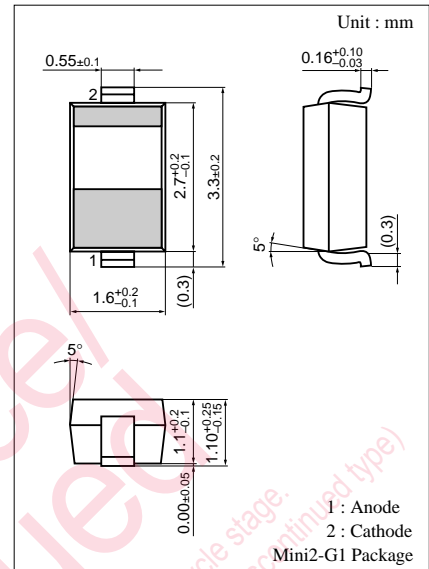
For electronic tuning of UHF and VHF TV tuner

■ Features

- Small series resistance r_D and high Q value
- Large capacitance ratio during low-voltage operation

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

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



Marking Symbol: 6C

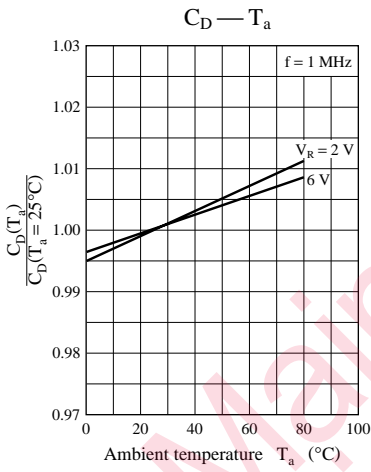
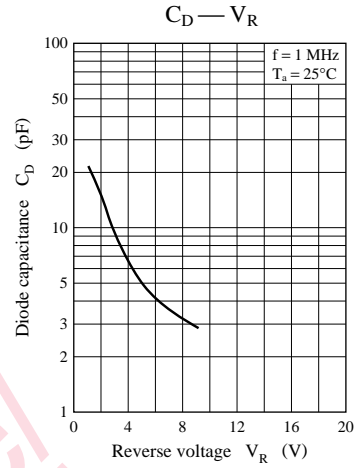
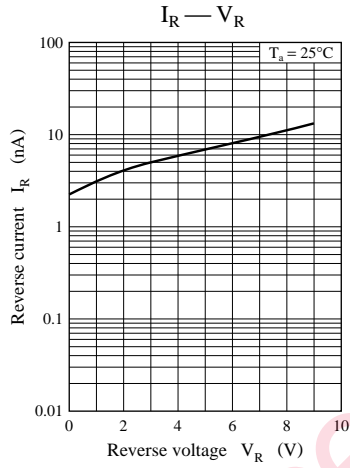
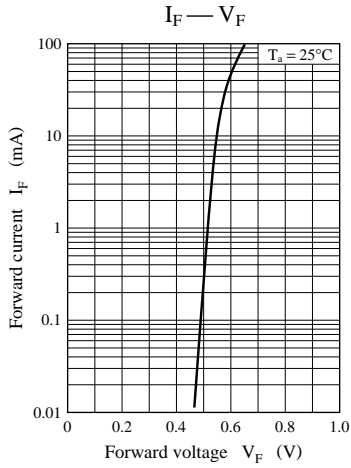
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

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

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

2. * : r_f measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER

Note) The part number in the parenthesis shows conventional part number.



Maintenance/Discontinued

Maintenance/Discontinued includes following four Product lifecycle stage.
(planned maintenance type, maintenance type, planned discontinued type, discontinued type)

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