

# MA2C859

## Silicon epitaxial planar type

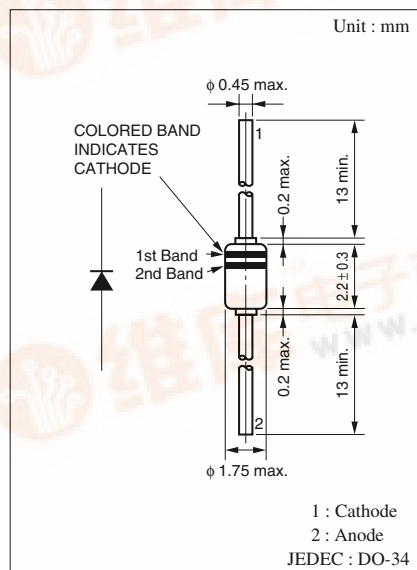
For band switching

### ■ Features

- Extra-small DHD envelope, allowing to insert into a 5 mm pitch hole
- Less voltage dependence of the terminal capacitance  $C_t$
- Low forward dynamic resistance  $r_f$
- Optimum for a band switching of a tuner

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

| Parameter                     | Symbol    | Rating      | Unit             |
|-------------------------------|-----------|-------------|------------------|
| Reverse voltage (DC)          | $V_R$     | 35          | V                |
| Forward current (DC)          | $I_F$     | 100         | mA               |
| Operating ambient temperature | $T_{opr}$ | -25 to +85  | $^\circ\text{C}$ |
| Storage temperature           | $T_{stg}$ | -55 to +100 | $^\circ\text{C}$ |



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

| Parameter                  | Symbol     | Conditions                              | Min | Typ  | Max  | Unit     |
|----------------------------|------------|-----------------------------------------|-----|------|------|----------|
| Reverse current (DC)*1     | $I_R$      | $V_R = 33\text{ V}$                     |     |      | 100  | nA       |
| Forward voltage (DC)       | $V_F$      | $I_F = 100\text{ mA}$                   |     |      | 1.0  | V        |
| Terminal capacitance       | $C_t$      | $V_R = 6\text{ V}, f = 1\text{ MHz}$    |     | 0.8  | 1.2  | pF       |
| Forward dynamic resistance | $r_f^{*2}$ | $I_F = 2\text{ mA}, f = 100\text{ MHz}$ |     | 0.5  | 0.65 | $\Omega$ |
|                            | $r_f^{*3}$ |                                         |     | 0.77 | 0.98 | $\Omega$ |

Note) 1. Rated input/output frequency: 100 MHz

2. \*1 : Measurement in light shielded condition

\*2 :  $r_f$  measuring instrument: Nihon Koshuha MODEL TDC-121A Lead length 5mm

\*3 :  $r_f$  measuring instrument: YHP 4191A Lead length 5mm

### ■ Cathode Indication

| Type No. | MA2C859  |       |
|----------|----------|-------|
| Color    | 1st Band | Black |
|          | 2nd Band | Blue  |



