

# MA2S707

## Silicon epitaxial planer type

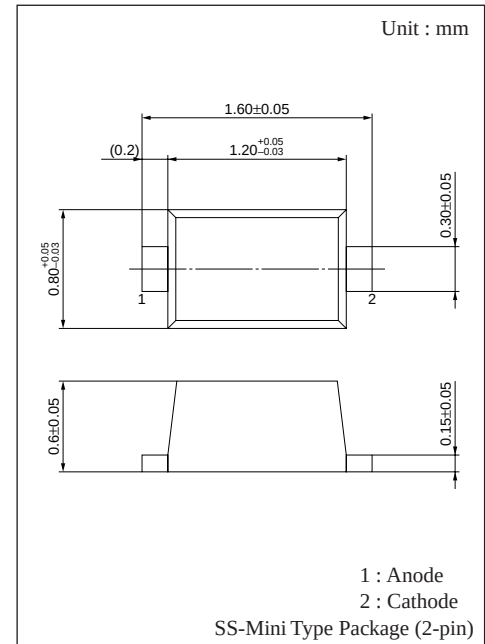
For UHF mixer

### ■ Features

- Small forward voltage  $V_F$
- Large conversion gain GC and optimum for UHF mixer
- SS-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) | $V_R$     | 5             | V    |
| Forward voltage      | $V_F$     | 0.5           | V    |
| Junction temperature | $T_j$     | 125           | °C   |
| Storage temperature  | $T_{stg}$ | – 55 to + 125 | °C   |



Marking Symbol : Y

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

| Parameter                  | Symbol      | Condition                                               | min  | typ  | max  | Unit |
|----------------------------|-------------|---------------------------------------------------------|------|------|------|------|
| Forward current (DC)       | $I_F$       | $V_F = 0.5V$                                            | 35   |      | 100  | mA   |
| Reverse current (DC)       | $I_R$       | $V_R = 5V$                                              |      |      | 35   | μA   |
| Forward voltage (DC)       | $V_F$       | $I_F = 2mA$                                             |      | 0.25 |      | V    |
| Reverse yield voltage (DC) | $V_{(BR)R}$ | $I_R = 1mA$                                             | 5    |      |      | V    |
| Terminal capacitance       | $C_t$       | $V_R = 0.5V, f = 1MHz$                                  | 0.65 | 0.85 | 1.05 | pF   |
| Conversion gain            | GC*1, 2     | $R_F = 890MHz, L_O = 935MHz, I_F = 45MHz$               | – 7  | – 5  |      | dB   |
| Static breakdown strength  | —           | $C = 100pF$ Breakdown judgment point $I_R \geq 35\mu A$ | 100  | 200  |      | V    |

Note 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.

2. Rated input/output frequency : 935MHz

3. \*1 Judgement is to be made per each chip lot. Sampling of LTPD= 20% and n=11 is guaranteed.

\*2 GC= –7dB min. Any substandard product will be negotiated by both parties.

### ■ Marking



