PRELIMINARY

2SC5789

Notics:This is not a final specification. Some parametric limits are subject to change. FOR HIGH FREQUENCY AMPLIFY APPLICATION SILICON NPN EPITAXIAL TYPE

DESCRIPTION

2SC5789 is a ultra super mini package resin sealed silicon NPN epitaxial transistor,

It is designed for high frequency application.

Since it is a super-thin flat lead type package,a high-density mounting are possible.

FEATURE

Super-thin flat lead type package.

t=0.45mm

High gain bandwidth product.

fT=12.0GHz

High gain, low noise.

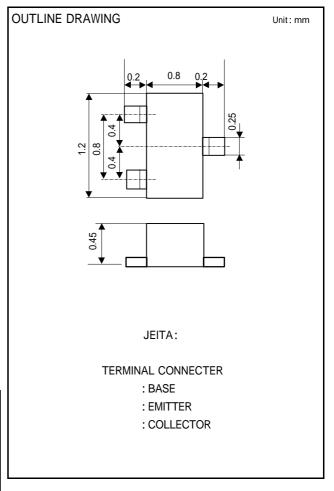
Can operate at low voltage.

APPLICATION

For TV tuners, high frequency amplifier, celluar phone system.

MAXIMUM RATINGS(Ta=25)

| Symbol | Parameter | Ratings | Unit | |
|------------------|------------------------------|-------------|------|--|
| V _{CBO} | Collector to Base voltage 15 | | V | |
| V_{CEO} | Collector to Emitter voltage | 6 | V | |
| V_{EBO} | Emitter to Base voltage | 1.5 | V | |
| Ιo | Collector current | 50 | mA | |
| P _c | Collector dissipation | | mW | |
| Tj | Junction temperature | + 125 | | |
| T_{stg} | Storage temperature | -55 ~ + 125 | | |



ELECTRICAL CHARACTERISTICS(Ta=25)

| Parameter | Symbol | Test conditions | Limits | | | Unit |
|------------------------------|-------------------|---|--------|------|-----|------|
| Farameter | | | Min | Тур | Max | Onit |
| Collector cut off current | ICBO | V _{CB} =10V, I _E =0mA | - | - | 1.0 | μA |
| Emitter cut off current | IEBO | V _{EB} =1V, I _C =0mA | - | - | 1.0 | μA |
| DC forward current gain | hFE | V_{CE} =5V, I_{C} =10mA | 30 | - | 250 | |
| Gain bandwidth product | fT | V _{CE} =5V, I _E =10mA | - | 12.0 | - | GHz |
| Collector output capacitance | Cob | V _{CB} =5V, I _E =0mA,f=1MHz | - | 0.7 | - | pF |
| Insertion power gain | S21 ² | V_{CE} =5V, I_{C} =10mA,f=1GHz | 10.0 | 13.0 | - | dB |
| Noise figure | NF | V_{CE} =5V, I_{C} =5mA,f=1GHz | - | 1.2 | - | dB |



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