NPN SILICON EPITAXIAL TRANSISTOR UTC 2SC3356

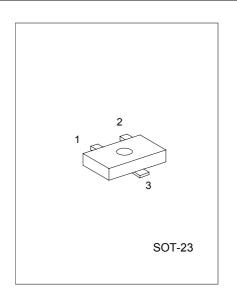
HIGH FREQUENCY LOW NOISE **AMPLIFIER**

FEATURES

- *Low Noise and High Gain
- *High Power Gain

MARKING





1: EMITTER 2: BASE 3: COLLECTOR

ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

| PARAMETER | SYMBOL | RATING | UNIT |
|---------------------------|------------------|------------|------|
| Collector-base voltage | WCBQaSheet4U.com | 20 | V |
| Collector-emitter voltage | VCEO | 12 | V |
| Emitter-base voltage | VEBO | 3 | V |
| Collector current | lc | 100 | mA |
| Total power dissipation | Рт | 200 | mW |
| Junction Temperature | Tj | 150 | °C |
| Storage Temperature | Tstg | -65 ~ +150 | °C |

ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

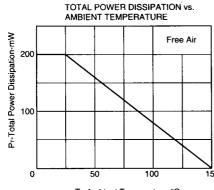
| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------------------|------------------|---|-----|-----|-----|------|
| Collector Cutoff Current | I _{CBO} | V_{CB} =10V, I_{E} =0 | | | 1.0 | μА |
| Emitter Cutoff Current | I _{EBO} | V_{EB} =1V, I_{C} =0 | | | 1.0 | μΑ |
| DC Current Gain | h _{FE} | V_{CE} =10V, I_{C} =20mA | 50 | | 300 | |
| Gain bandwidth Product | fT | V_{CE} =10V, I_{C} =20mA | | 7 | | GHz |
| Feed-Back Capacitance | Cre | V_{CB} =10V, I_E =0, f=1.0MHz | | | 1.0 | pF |
| Noise figure | NF | V _{CE} =10V, I _C =7mA, f=1.0GHz | | | 2.0 | dB |

CLASSIFICATION OF hFE

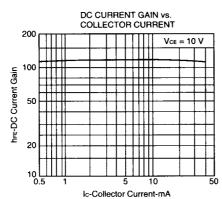
| RANK | А | В | С |
|-------|--------|---------|---------|
| RANGE | 50-160 | 160-240 | 240-300 |

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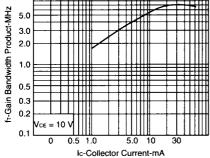
TYPICAL CHARACTERISTICS (TA=25°C)



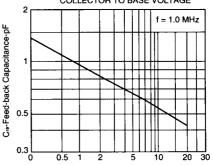
Ta-Ambient Temperature-°C



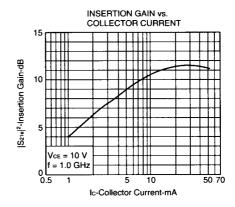
GAIN BANDWIDTH PRODUCT vs. COLLECTOR CURRENT 10



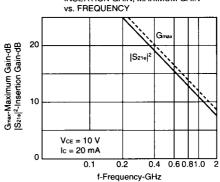
FEED-BACK CAPACITANCE vs. COLLECTOR TO BASE VOLTAGE



Vcs-Collector to Base Voltage-V

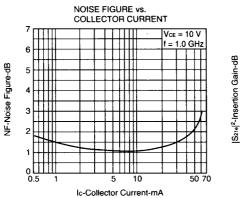


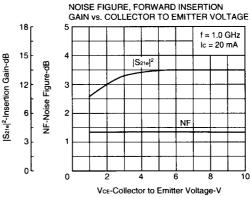
INSERTION GAIN, MAXIMUM GAIN



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