

SOT23 PNP SILICON PLANAR R.F. TRANSISTORS

ZBF569 ZBF579

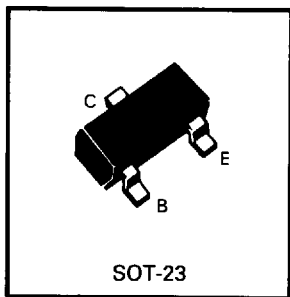
FEATURES.

- * HIGH f_T UP TO 2.4GHz.
- * LOW NOISE <3.3dB AT 500MHz

PARTMARKING DETAILS

ZBF569 – F69

ZBF579 – F79



ABSOLUTE MAXIMUM RATINGS.

| PARAMETER | SYMBOL | ZBF569 | ZBF579 | UNIT |
|------------------------------|-----------|--------|--------|------|
| Collector-Base Voltage | V_{CBO} | 35 | 25 | V |
| Collector-Emitter Voltage | V_{CEO} | 35 | 25 | V |
| Emitter-Base Voltage | V_{EBO} | 3 | 3 | V |
| Continuous Collector Current | I_C | 30 | 30 | mA |
| Peak Pulse Current | I_{CM} | 50 | 50 | mA |

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ unless otherwise stated).

| Parameter | Symbol | ZBF569 | | | ZBF579 | | | Unit | Test Conditions |
|---------------------------------------|-----------|--------|------|------|--------|------|------|---------|--|
| | | Min. | Typ. | Max. | Min. | Typ. | Max. | | |
| Collector Cut-Off Current | I_{CBO} | | | 10 | | | 10 | nA | $I_E=0, V_{CB}=-10V$ |
| | | | | | | | 10 | μA | $I_E=0, V_{CB}=-10V, T_J=100^\circ C$ |
| Static Forward Current Transfer Ratio | H_{FE} | | | | 25 | | 150 | | $I_C=-2mA, V_{CE}=-1.0V$ |
| | | 25 | | 150 | | | | | $I_C=-3mA, V_{CE}=-1.0V$ |
| | | | | | 20 | | 150 | | $I_C=-25mA, V_{CE}=-1.0V$ |
| Transition Frequency | f_T | | 1.5 | | | 2.4 | | GHz | $I_C=-10mA, V_{CE}=-10V, f=500MHz$ |
| Feedback Capacitance | $-C_{re}$ | | 0.8 | | | 0.9 | | pF | $I_C=-1mA, V_{CE}=-10V, f=500MHz$ |
| Noise Figure | N | | 3.5 | | | 3.3 | | dB | $I_C=-1mA, V_{CE}=-5V, R_S=50\Omega, f=500MHz$ |