

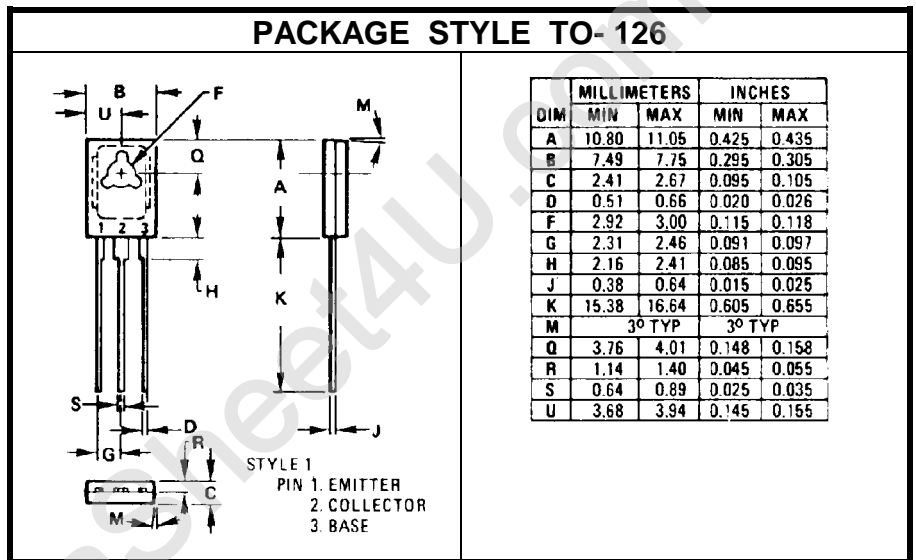
NPN SILICON HIGH FREQUENCY TRANSISTOR

DESCRIPTION:

The **ASI BFT51F.A** is Designed for High Frequency Amplifier Applications.

MAXIMUM RATINGS

| | |
|---------------|---------------------------------|
| I_C | 500 mA |
| V_{CE} | 20 V |
| P_{DISS} | 3.0 W @ $T_C = 25^\circ C$ |
| T_J | $-65^\circ C$ to $+175^\circ C$ |
| T_{STG} | $-65^\circ C$ to $+175^\circ C$ |
| θ_{JC} | $50^\circ C/W$ |



CHARACTERISTICS $T_C = 25^\circ C$

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|---|---------|---------|---------|---------|
| BV_{CEO} | $I_C = 5.0$ mA | 10 | | | V |
| BV_{CER} | $I_C = 1.0$ mA $R_{BE} = 100 \Omega$ | 18 | | | V |
| BV_{CBO} | $I_C = 1.0$ mA | 20 | | | V |
| I_{CEO} | $V_{CE} = 5.0$ V | | | 1.0 | mA |
| I_{CES} | $V_{CE} = 10$ V | | | 100 | μA |
| I_{EBO} | $V_{EB} = 3.0$ V | | | 1.0 | mA |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 100$ mA $I_C = 300$ mA | 40 | | | --- |
| f_t | $V_{CE} = 5.0$ V $I_C = 300$ mA $f = 100$ MHz | 1.0 | 2.0 | | GHz |
| C_{ob} | $V_{CB} = 5.0$ V $f = 1.0$ MHz | | 4.0 | | pF |