

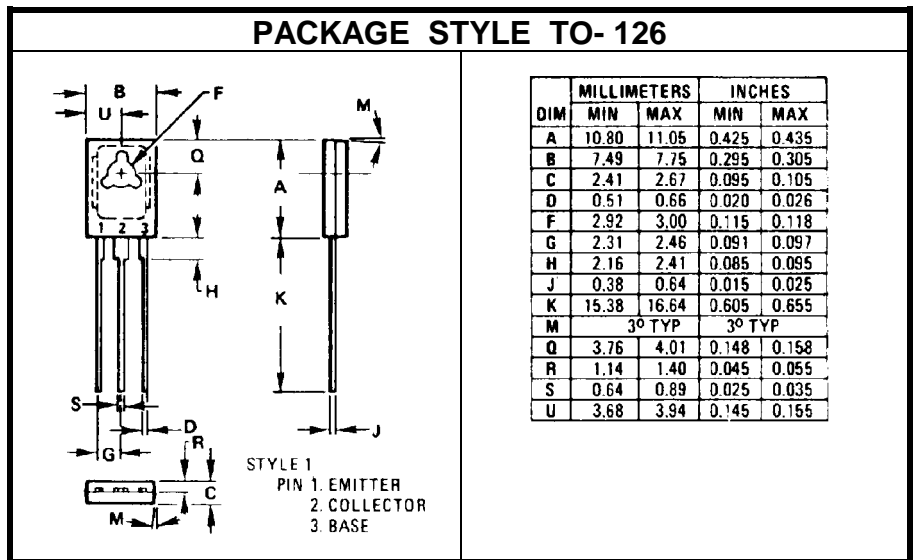
# NPN SILICON HIGH FREQUENCY TRANSISTOR

**DESCRIPTION:**

The **ASI BFT51** is Designed for High Frequency Amplifier Applications.

**MAXIMUM RATINGS**

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


**CHARACTERISTICS**  $T_C = 25\text{ }^\circ\text{C}$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 10\text{ mA}$	10			V
$BV_{CER}$	$I_C = 10\text{ mA}$ $R_{BE} = 100\ \Omega$	19			V
$BV_{CBO}$	$I_C = 5.0\text{ mA}$	20			V
$BV_{EBO}$	$I_C = 1.0\text{ mA}$	3.0			V
$I_{CES}$	$V_{CE} = 10\text{ V}$			100	$\mu\text{A}$
$H_{FE}$	$V_{CE} = 5.0\text{ V}$ $I_C = 100\text{ mA}$ $I_C = 300\text{ mA}$	40			---
		50			
$f_t$	$V_{CE} = 5.0\text{ V}$ $I_C = 300\text{ mA}$ $f = 100\text{ MHz}$	1.0	2.0		GHz
$C_{cb}$	$V_{CB} = 5.0\text{ V}$ $f = 1.0\text{ MHz}$		4.2		Pf
$C_C$	$V_{CB} = 5.0\text{ V}$ $f = 1.0\text{ MHz}$		5.8		Pf