

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 @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+175^\circ\text{C}$
T_{STG}	-65°C to $+175^\circ\text{C}$
θ_{JC}	50 $^\circ\text{C/W}$

PACKAGE STYLE TO- 126				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	10.80	11.05	0.425	0.435
B	7.49	7.75	0.295	0.305
C	2.41	2.67	0.095	0.105
D	0.51	0.66	0.020	0.026
F	2.92	3.00	0.115	0.118
G	2.31	2.46	0.091	0.097
H	2.16	2.41	0.085	0.095
J	0.38	0.64	0.015	0.025
K	15.38	16.64	0.605	0.655
M	3 $^\circ$ TYP		3 $^\circ$ TYP	
Q	3.76	4.01	0.148	0.158
R	1.14	1.40	0.045	0.055
S	0.64	0.89	0.025	0.035
U	3.68	3.94	0.145	0.155

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

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