

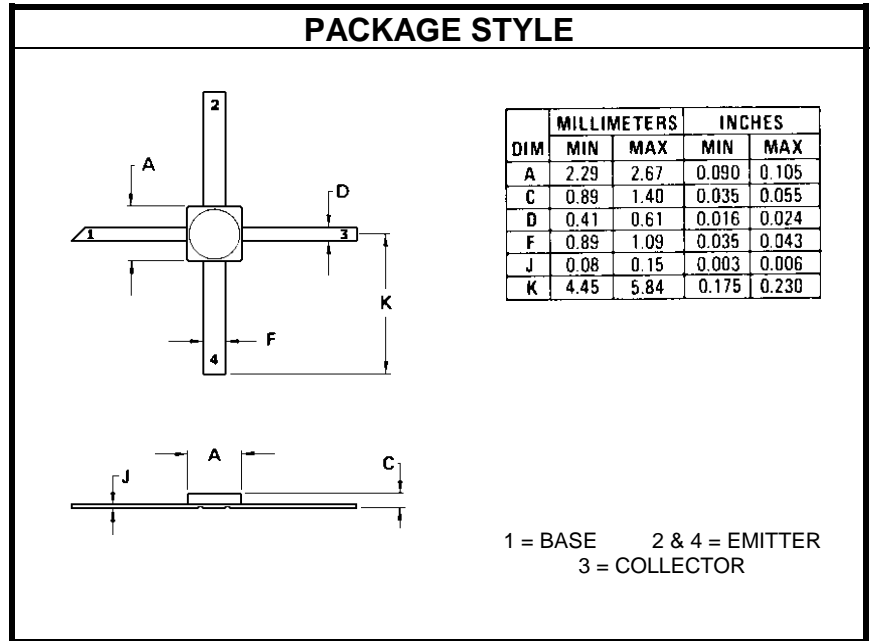
NPN SILICON BIPOLAR TRANSISTOR

DESCRIPTION:

The **ASI AT41470** is a Common Emitter Device Designed for low noise, wideband amplifier, mixer and oscillator applications in the VHF, UHF, and microwave frequencies.

MAXIMUM RATINGS

I_C	60 mA
V_{CEO}	12 V
V_{CB0}	20 V
V_{EBO}	1.5 V
P_{DISS}	500 mW @ T _C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C



CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
I_{CB0}	V _{CB} = 8.0 V			200	Na
I_{EBO}	V _{EB} = 1.0 V			1.0	μA
h_{FE}	V _{CE} = 8.0 V I _C = 10 mA	30	150	300	---
C_{CB}	V _{CB} = 8.0 V f = 1.0 MHz		0.2		pF
f_t	V _{CE} = 8.0 V I _C = 25 mA f = 1.0 GHz		8.0		GHz
 S_{21E} ²	V _{CE} = 8.0 V I _C = 25 mA f = 2.0 GHz f = 4.0 GHz		12.0 6.5		dB
P_{1dB}	V _{CE} = 8.0 V I _C = 25 mA f = 2.0 GHz f = 4.0 GHz		19.0 18.5		dBm
G_{1dB}	V _{CE} = 8.0 V I _C = 25 mA f = 2.0 GHz f = 4.0 GHz		15.0 10.5		dB
NF_O	V _{CE} = 8.0 V I _C = 10 mA f = 1.0 GHz f = 2.0 GHz f = 4.0 GHz		1.3 1.6 3.0	1.9	dB