NPN SILICON MICROWAVE TRANSISTOR

DESCRIPTION:

The **ASI NE64700** is a bipolar transistor Designed for low noise applications at VHF, UFH and microwave frequencies up to 12 GHz.

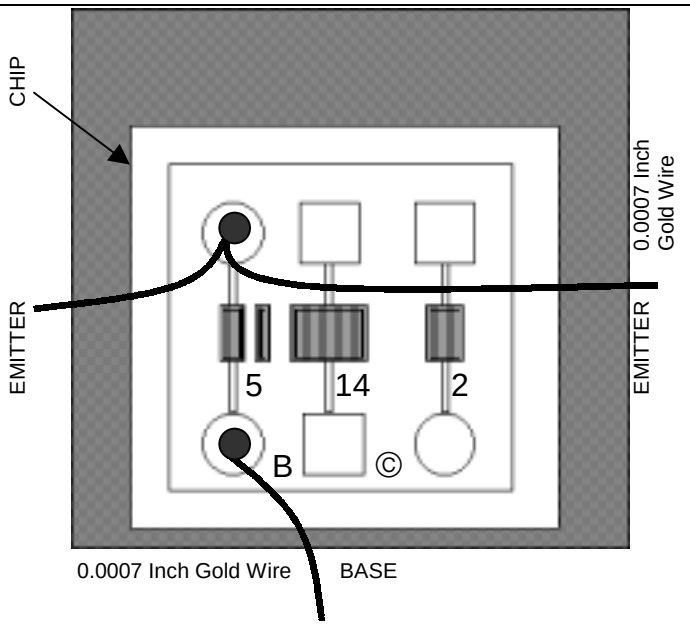
FEATURES:

- **P_G** = 18.1 dB Typical @ 1.0 GHz
- **NF** = 1.6 dB Typical @ 1.0 GHz

MAXIMUM RATINGS

I_C	20 mA
V_{CEO}	7.0 V
V_{CBO}	9.0 V
V_{EBO}	1.5 V
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C

PACKAGE STYLE: CHIP



Chip Dimension: (250 x 250) x 125 µm
Bond Pad: 50 x 50 µm
Die Attach: Gold Eutectic

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
I_{CBO}	V_{CB} = 8.0 V					0.2	µA
I_{EBO}	V_{EB} = 1.0 V					1.0	µA
h_{FE}	V_{CE} = 8.0 V	I_C = 10 mA		50	100	250	---
C_{CB}	V_{CB} = 8.0 V		f = 1.0 MHz		0.11		pF
NF	V_{CE} = 8.0 V	I_C = 2.0 mA	f = 1.0 MHz		1.6		dB
P_G	V_{CE} = 8.0 V	I_C = 10 mA	f = 1.0 GHz		15		dB
P_{1dB}					12		dBm
f_t	I_C = 10 mA				12		GHz
$\|S21\|^2$	V_{CE} = 8.0 V	I_C = 10 mA	f = 1.0 GHz		7.5		dB
		I_C = 20 mA	f = 1.0 GHz		18.1		
		I_C = 10 mA	f = 2.0 GHz		12.8		
		I_C = 20 mA	f = 2.0 GHz		12.6		