

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

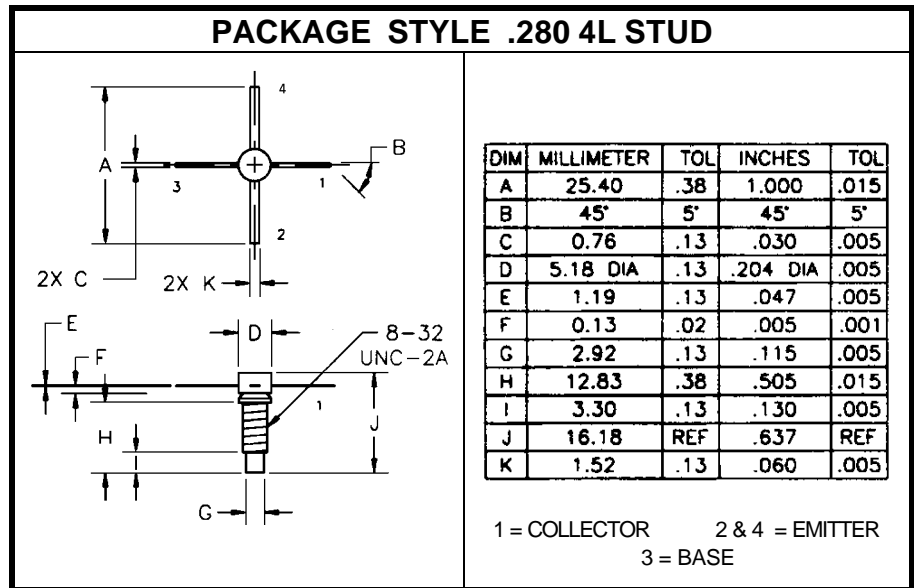
The **ASI LT3014** is a Common Emitter Device Designed for General Purpose Class A and AB Amplifier Applications up to 1.0 GHz.

## FEATURES INCLUDE:

- Gold Metalization
- Emitter Ballasting
- High Gain

## MAXIMUM RATINGS

<b>I<sub>C</sub></b>	300 mA
<b>V<sub>CB</sub></b>	45 V
<b>P<sub>DISS</sub></b>	5.0 W @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-55 °C to +200 °C
<b>T<sub>STG</sub></b>	-55 °C to +200 °C
<b>q<sub>JC</sub></b>	33.0 °C/W



## CHARACTERISTICS T<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 10 mA	22			V
<b>BV<sub>CES</sub></b>	V <sub>BE</sub> = 0 V      I <sub>C</sub> = 10 mA	50			V
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 1.0 mA	3.5			V
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V      I <sub>C</sub> = 100 mA	20		200	—
<b>P<sub>G</sub></b>	V <sub>CE</sub> = 20 V      I <sub>CQ</sub> = 150 mA      f = 1.0 GHz	3.0	3.5		GHz
<b>P<sub>1dB</sub></b>	V <sub>CE</sub> = 20 V      I <sub>CQ</sub> = 150 mA      f = 1.0 GHz	27	29		dBm
<b>I<sub>P3</sub></b>	V <sub>CE</sub> = 20 V      I <sub>CQ</sub> = 150 mA      f = 1.0 GHz P <sub>OUT</sub> = 10 dBm (2 EQUAL TONES)		48		dBm
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 28 V      f = 1.0 MHz		2.0	3.0	pF
<b>f<sub>t</sub></b>	V <sub>CE</sub> = 20 V      I <sub>CQ</sub> = 150 mA      f = 1.0 GHz	3.0	3.5		GHz