

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

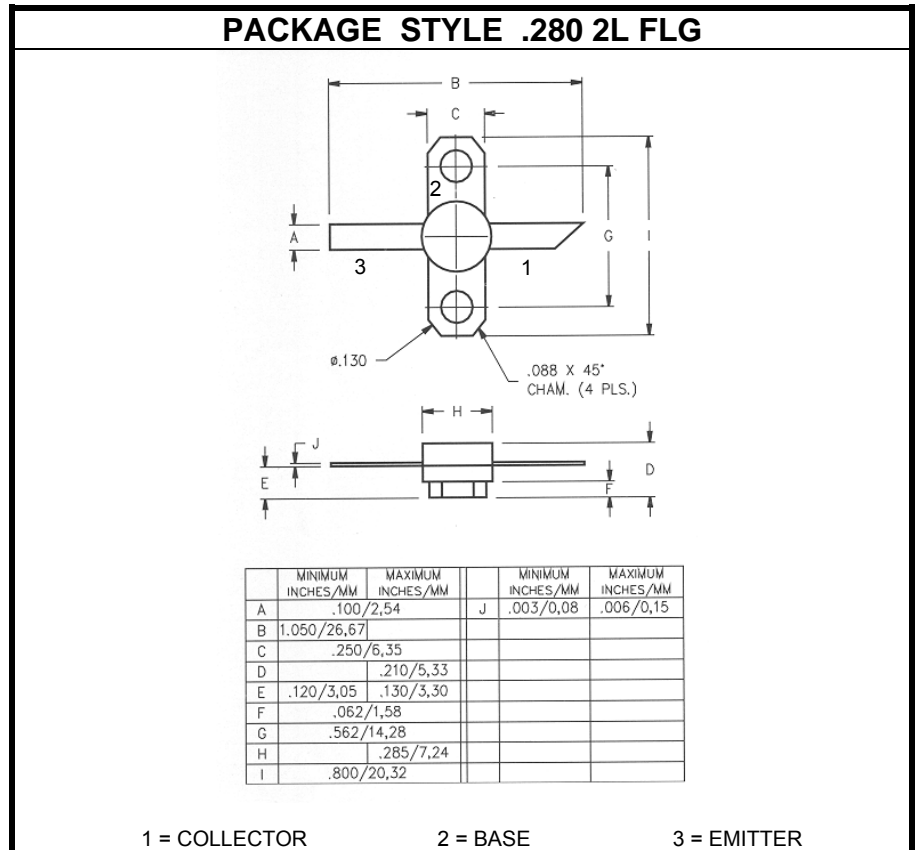
The **ASI MSC80614** is designed for Class C, DME/TACAN Applications up to 1150 MHz.

**FEATURES INCLUDE:**

- **Omnigold™** Metalization system
- Input Matching network
- Emitter Ballasting

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	250 mA
<b>V<sub>CC</sub></b>	37 V
<b>P<sub>DISS</sub></b>	10 W @ T <sub>C</sub> ≤ 100 °C
<b>T<sub>J</sub></b>	-65 °C to +200 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b>θ<sub>JC</sub></b>	10 °C/W


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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 10 mA	45			
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 5.0 mA      R <sub>BE</sub> = 10 Ω	45			V
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 1.0 mA	3.5			V
<b>I<sub>CES</sub></b>	V <sub>CE</sub> = 35 V			1.0	mA
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V      I <sub>C</sub> = 100 mA	30		300	---
<b>P<sub>G</sub></b>	V <sub>CC</sub> = 35 V    P <sub>OUT</sub> = 2.0 W    f = 1025 to 1150 MHz PULSE WIDTH = 10 μS      DUTY CYCLE = 1.0%	9.0			dB
<b>P<sub>IN</sub></b>		0.25			W
<b>η<sub>C</sub></b>		35			%