

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

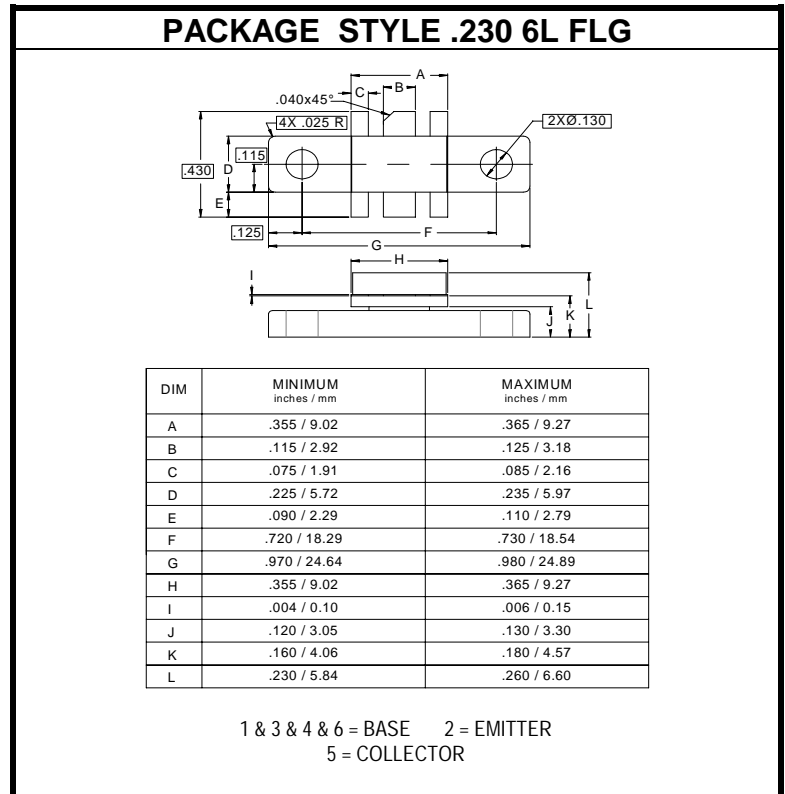
The **MRF846** is Designed for UHF Large-Signal, Common Base Amplifier Applications Up to 960 MHz.

**FEATURES INCLUDE:**

- Input Matching Network
- Min Gain 4.3 dB
- Gold Metalization

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	14 A
<b>V<sub>CB0</sub></b>	36 V
<b>V<sub>CEO</sub></b>	16 V
<b>P<sub>DISS</sub></b>	150 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 +150 °C
<b>θ<sub>JC</sub></b>	1.17 °C/W


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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CES</sub></b>	I <sub>C</sub> = 50 mA	36			<b>V</b>
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 50 mA	16			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 100 mA	4.0			<b>V</b>
<b>I<sub>CB0</sub></b>	V <sub>CE</sub> = 15 V			10	<b>mA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 2.0 mA	10		150	<b>---</b>
<b>C<sub>OB</sub></b>	V <sub>CB</sub> = 12.5 V    f = 1.0 MHz		85	100	<b>pF</b>
<b>P<sub>G</sub></b>	V <sub>CE</sub> = 12.5 V    I <sub>CQ</sub> = 50mA    P <sub>OUT</sub> = 40 W	4.3	5.2		<b>dB</b>
<b>η<sub>C</sub></b>	f = 870 MHz	50	55		<b>%</b>