

# NPN RF POWER TRANSISTOR

**DESCRIPTION:**

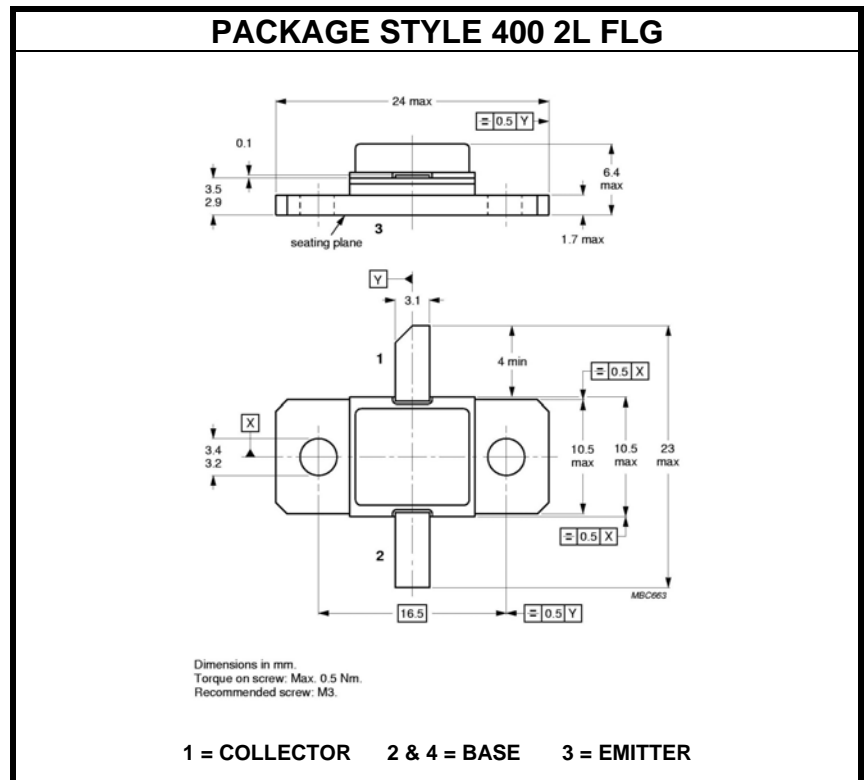
The **AM82731-050** is a Common Base Device Designed for Pulsed S-Band Pulse output and driver Applications.

**FEATURES INCLUDE:**

- Input/Output Matching
- Gold Metallization
- Emitter Ballasting

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	4.0 A
<b>V<sub>CC</sub></b>	46 V
<b>P<sub>DISS</sub></b>	100 W @ T <sub>C</sub> ≤ 50 °C
<b>T<sub>J</sub></b>	-65 °C to +250 °C
<b>T<sub>STG</sub></b>	-65 °C to +200 °C
<b>θ<sub>JC</sub></b>	2.0 °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> = 15 mA	55			V
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 15 mA    R <sub>BE</sub> = 10 Ω	55			V
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 2.0 mA	3.5			V
<b>I<sub>CES</sub></b>	V <sub>CE</sub> = 40 V			10	mA
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5 V    I <sub>C</sub> = 1.5 A	30			---
<b>P<sub>OUT</sub></b>	V <sub>CC</sub> = 40 V    P <sub>IN</sub> = 12.5 W    f = 2.7 to 3.1 GHz	50	56		W
<b>η<sub>C</sub></b>		30	35		%
<b>P<sub>G</sub></b>		6.0	6.5		dB

Note: Pulse Width = 100 μS  
Duty Cycle = 10%