

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

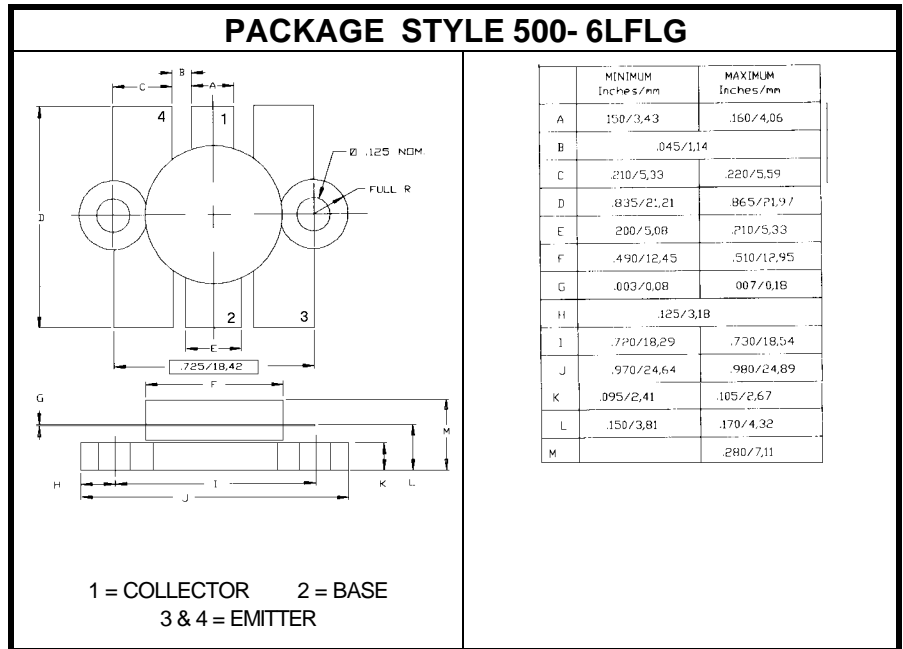
The **ASI UMIL100** is Designed for Class C Amplifier Applications in 225 to 400 MHz Military Radios.

**FEATURES INCLUDE:**

- Internal Input Matching
- Gold Metalization
- Emitter Ballasting

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	4 A
<b>V<sub>CB</sub></b>	60 V
<b>P<sub>DISS</sub></b>	250 W @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-65 °C to +200 °C
<b>T<sub>STG</sub></b>	-65 °C to +150 °C
<b>q<sub>JC</sub></b>	0.7 °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> = 50 mA	33			V
<b>BV<sub>CES</sub></b>	I <sub>C</sub> = 100 mA	60			V
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 100 mA	60			V
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 5 mA	4.0			V
<b>I<sub>CBO</sub></b>	V <sub>CB</sub> = 30 V			50	mA
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 1.0 A	10			---
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 28 V    f = 1.0 MHz		120		pF
<b>P<sub>G</sub></b> <b>h<sub>c</sub></b> <b>y</b>	V <sub>CE</sub> = 28 V    P <sub>OUT</sub> = 100 W    F = 225 – 400 MHz Load VSWR = ∞:1    (All Phase Angles)		7.0 65		dB % ---