

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

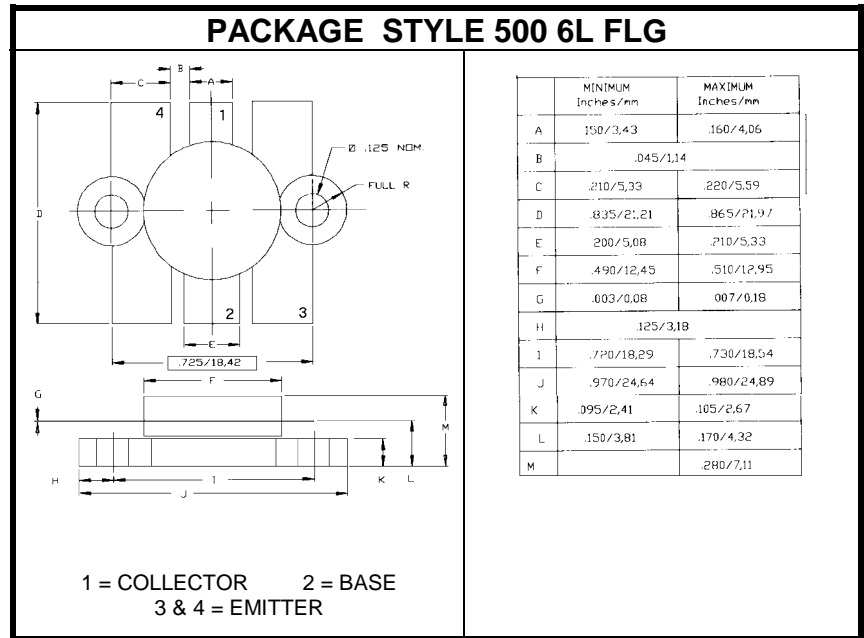
The **ASI TPV385** is Designed for Operation in Band III TV Transposers and Transmitter Amplifiers from 170 to 230 MHz.

**FEATURES INCLUDE:**

- Gold Metalization
- Emitter Ballast Resistors
- Internal Input Matching
- Common Emitter

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	10 A (CONT)
<b>V<sub>CB</sub></b>	65 V
<b>V<sub>CE</sub></b>	35 V
<b>T<sub>J</sub></b>	-65 °C to +200 °C
<b>T<sub>STG</sub></b>	-65 °C to +200 °C
<b>θ<sub>JC</sub></b>	1.5 °C/W


**CHARACTERISTICS**  $T_C = 25\text{ }^\circ\text{C}$ 

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 50 mA			35			<b>V</b>
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 50 mA	R <sub>BE</sub> = 10 Ω		60			<b>V</b>
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 50 mA			65			<b>V</b>
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 10 mA			4.0			<b>V</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V	I <sub>C</sub> = 1.0 A		20		100	<b>---</b>
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 30 V	f = 1.0 MHz			65	85	<b>pF</b>
<b>G<sub>P</sub></b> <b>IMD<sub>1</sub></b>	V <sub>CE</sub> = 28 V	P <sub>out</sub> = 14 W	f = 225 MHz	14	15	-53	<b>dB</b> <b>dB</b>
<b>ψ</b>	V <sub>CE</sub> = 28 V P <sub>out</sub> = 14 W	ALL PHASE ANGLES LOAD VSWR = ∞:1		NO DEGRADATION IN OUTPUT POWER			