

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

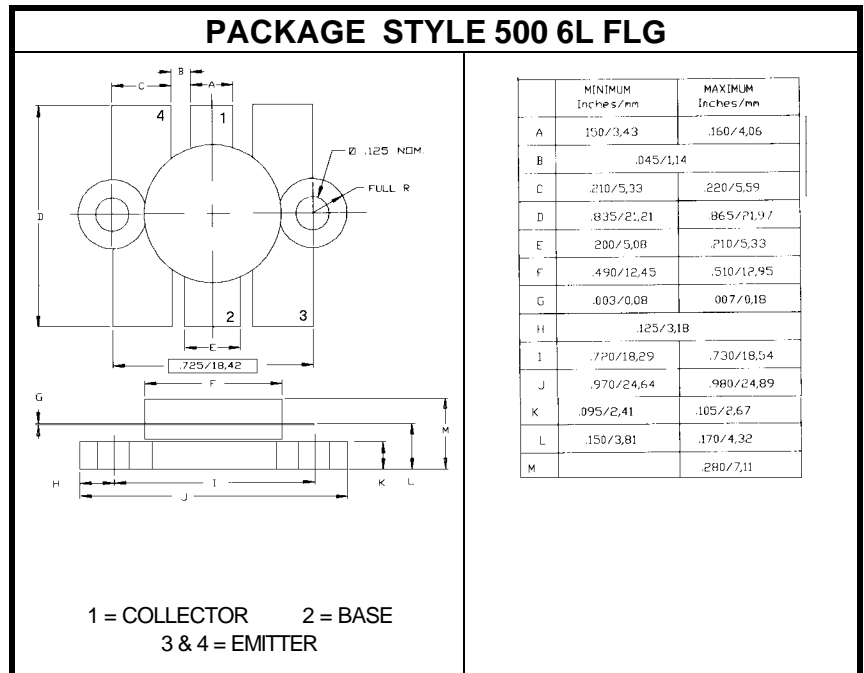
The **TPV387** is Designed for Operation in Band III TV Transposers and Transmitter Amplifiers from 170 to 230 MHz.

**FEATURES INCLUDE:**

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

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	16 A (CONT)
<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>q<sub>JC</sub></b>	1.0 °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> = 100 mA	35			<b>V</b>
<b>BV<sub>CER</sub></b>	I <sub>C</sub> = 100 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> = 20 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		130	150	<b>pF</b>
<b>G<sub>PE</sub></b>	V <sub>CC</sub> = 28 V    P <sub>out</sub> = 24 W    f = 225 MHz	13			<b>dB</b>
<b>y</b>	V <sub>CC</sub> = 28 V    ALL PHASE ANGLES    f = 225 MHz P <sub>out</sub> = 24 W    LOAD VSWR = ∞:1	NO DEGRADATION IN OUTPUT POWER			
<b>IMD<sub>1</sub></b>	V <sub>CE</sub> = 28 V    P <sub>ref</sub> = 24 W    f = 225 MHz VISION CARRIER = -8 dB    SOUND CARRIER = -7 dB SIDE BAND SIGNAL = -16 dB    I <sub>E</sub> = 3.5 A			-50	<b>dB</b>
<b>P<sub>o1dB</sub></b>	V <sub>CC</sub> = 28 V    I <sub>Q</sub> = 200 mA    f = 225 MHz	90			<b>W</b>



---

*ADVANCED SEMICONDUCTOR, INC.*

7525 ETHEL AVENUE • NORTH HOLLYWOOD, CA 91605 • (818) 982-1202 • TELEX: 18-2651 • FAX (818) 765-3004