

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

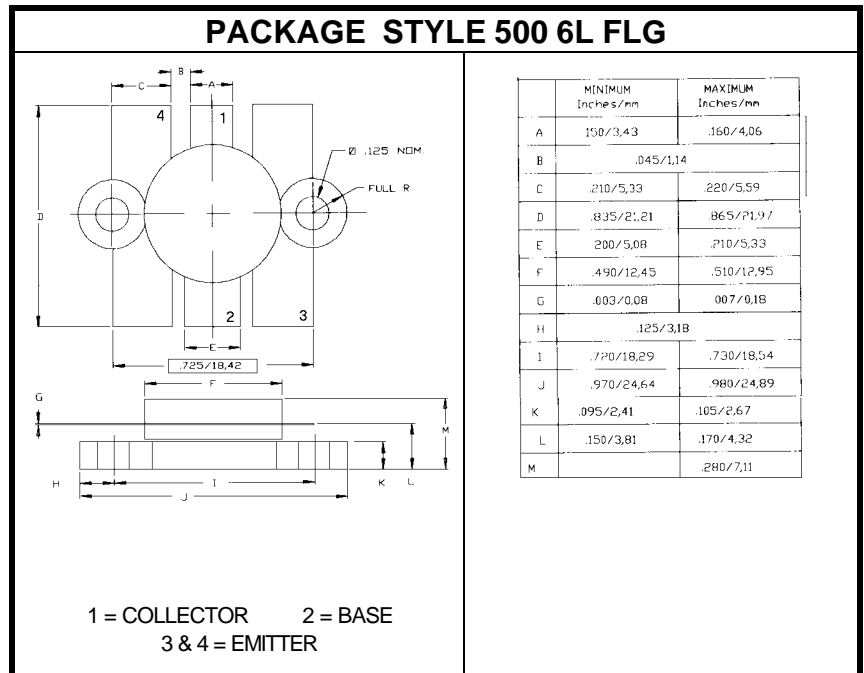
The **TPV387** is Designed for Operation in Band III TV Transposers and Transmitter Amplifiers from 170 to 230 MHz.

**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>	$I_C = 100\text{ mA}$	35			<b>V</b>
<b>BV<sub>CER</sub></b>	$I_C = 100\text{ mA}$ $R_{BE} = 10\ \Omega$	60			<b>V</b>
<b>BV<sub>CBO</sub></b>	$I_C = 50\text{ mA}$	65			<b>V</b>
<b>BV<sub>EBO</sub></b>	$I_E = 20\text{ mA}$	4.0			<b>V</b>
<b>h<sub>FE</sub></b>	$V_{CE} = 5.0\text{ V}$ $I_C = 1.0\text{ A}$	20		100	<b>---</b>
<b>C<sub>ob</sub></b>	$V_{CB} = 30\text{ V}$ $f = 1.0\text{ MHz}$		130	150	<b>pF</b>
<b>G<sub>PE</sub></b>	$V_{CC} = 28\text{ V}$ $P_{out} = 24\text{ W}$ $f = 225\text{ MHz}$	13			<b>dB</b>
<b>y</b>	$V_{CC} = 28\text{ V}$ ALL PHASE ANGLES $f = 225\text{ MHz}$ $P_{out} = 24\text{ W}$ LOAD $VSWR = \infty:1$	NO DEGRADATION IN OUTPUT POWER			
<b>IMD<sub>1</sub></b>	$V_{CE} = 28\text{ V}$ $P_{ref} = 24\text{ W}$ $f = 225\text{ MHz}$ VISION CARRIER = -8 dB    SOUND CARRIER = -7 dB SIDE BAND SIGNAL = -16 dB $I_E = 3.5\text{ A}$			-50	<b>dB</b>
<b>P<sub>o1dB</sub></b>	$V_{CC} = 28\text{ V}$ $I_Q = 200\text{ mA}$ $f = 225\text{ MHz}$	90			<b>W</b>



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