

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI TPV593** is a Common Emitter Device Designed for Class A High Linearity Television Band IV and V Transmitter Applications.

**FEATURES INCLUDE:**

- Gold Metalization
- Emitter Ballasting
- High Gain

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	1.2 A
<b>V<sub>CB</sub></b>	45 V
<b>P<sub>DISS</sub></b>	17.5 W @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-55 °C to +200 °C
<b>T<sub>STG</sub></b>	-55 °C to +200 °C
<b>q<sub>JC</sub></b>	10 °C/W

**PACKAGE STYLE .280 4L STUD**

	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	1.010/25,65	1.055/26,80
B	.220/5,59	.230/5,84
C	.270/6,86	.285/7,24
D	.003/0,08	.007/0,18
E	.117/2,97	.137/3,48
F	.5/2/14,53	
G	.130/3,30	
H	.275/6,99	.285/7,24
I	.640/16,26	
J	.175/4,45	.21/75,51

1 = COLLECTOR      2 = BASE  
 3 & 4 = EMITTER

**CHARACTERISTICS** T<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 40 mA	26			<b>V</b>
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 10 mA	45			<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> = 250 mA	10			<b>---</b>
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 28 V      f = 1.0 MHz		8.0		<b>pF</b>
<b>P<sub>G</sub></b>	P <sub>o</sub> = 2.0 W      SOUND CARRIER = -10 dB VISION CARRIER = -8.0 dB      CHROMA = 16 dB V <sub>CE</sub> = 25 V      I <sub>C</sub> = 410 mA      f = 860 MHz	10	12		<b>dB</b>
<b>IMD<sub>3</sub></b>	P <sub>o</sub> = 2.0 W      SOUND CARRIER = -10 dB VISION CARRIER = -8.0 dB      CHROMA = 16 dB V <sub>CE</sub> = 25 V      I <sub>C</sub> = 410 mA      f = 860 MHz			-60	<b>dBc</b>