

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI TPV591** is a Common Emitter Device Designed for High Linearity Class A Television Band IV and V Transmitters.

**FEATURES INCLUDE:**

- Gold Metalization
- Emitter Ballasting

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	300 mA
<b>V<sub>CB</sub></b>	45 V
<b>P<sub>DISS</sub></b>	5.3 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>	33.0 °C/W

**PACKAGE STYLE .280 4L STUD**

DIM	MILLIMETER	TOL	INCHES	TOL
A	25.40	.38	1.000	.015
B	45°	5°	45°	5°
C	0.76	.13	.030	.005
D	5.18 DIA	.13	.204 DIA	.005
E	1.19	.13	.047	.005
F	0.13	.02	.005	.001
G	2.92	.13	.115	.005
H	12.83	.38	.505	.015
I	3.30	.13	.130	.005
J	16.18	REF	.637	REF
K	1.52	.13	.060	.005

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> = 10 mA	22			V
<b>BV<sub>CBO</sub></b>	I <sub>C</sub> = 10 mA	45			V
<b>BV<sub>EBO</sub></b>	I <sub>E</sub> = 1.0 mA	3.5			V
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = 5.0 V    I <sub>C</sub> = 100 mA	20		200	---
<b>C<sub>ob</sub></b>	V <sub>CB</sub> = 28 V    f = 1.0 MHz			3.0	pF
<b>P<sub>g</sub></b>	P <sub>ref</sub> = 0.5 W    f = 860 MHz SOUND CARRIER = -7.0 dB VISION CARRIER = -8.0 dB    CHROMA = -16 dB	13			dB
<b>IMD</b>	P <sub>ref</sub> = 0.5 W    f = 860 MHz V <sub>CE</sub> = 20 V    I <sub>C</sub> = 150 mA    SOUND CARRIER = -7.0 dB VISION CARRIER = -8.0 dB    CHROMA = -16 dB			-58	dB



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