

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

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

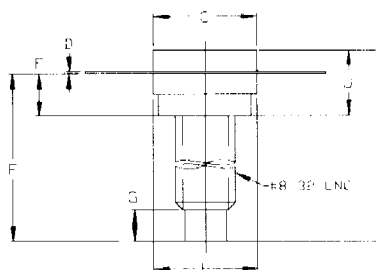
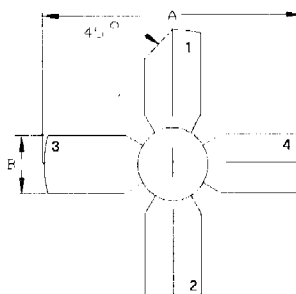
FEATURES INCLUDE:

- Gold Metalization
- Emitter Ballasting
- High Gain

MAXIMUM RATINGS

I_C	1.2 A
V_{CB}	45 V
P_{DISS}	17.5 W @ $T_C = 25^\circ\text{C}$
T_J	-55°C to $+200^\circ\text{C}$
T_{STG}	-55°C to $+200^\circ\text{C}$
θ_{JC}	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	.017/2.97	.037/3.48
F	5/2/14.53	
G	.130/3.30	
H	.275/6.99	.285/7.24
I	.040/1.02	
J	.175/4.45	.21/5.51

1 = COLLECTOR 2 = BASE
3 & 4 = EMITTER

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	$I_C = 40\text{ mA}$	26			V
BV_{CBO}	$I_C = 10\text{ mA}$	45			V
BV_{EBO}	$I_E = 10\text{ mA}$	4.0			V
h_{FE}	$V_{CE} = 5.0\text{ V}$ $I_C = 250\text{ mA}$	10			---
C_{ob}	$V_{CB} = 28\text{ V}$ $f = 1.0\text{ MHz}$		8.0		pF
P_G	$P_o = 2.0\text{ W}$ SOUND CARRIER = -10 dB VISION CARRIER = -8.0 dB CHROMA = 16 dB $V_{CE} = 25\text{ V}$ $I_C = 410\text{ mA}$ $f = 860\text{ MHz}$	10	12		dB
IMD3	$P_o = 2.0\text{ W}$ SOUND CARRIER = -10 dB VISION CARRIER = -8.0 dB CHROMA = 16 dB $V_{CE} = 25\text{ V}$ $I_C = 410\text{ mA}$ $f = 860\text{ MHz}$			-60	dBc