

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

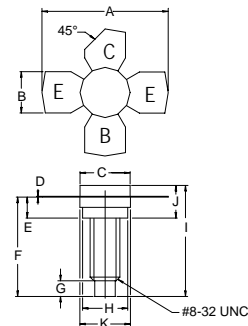
The **ASI TPV598** is Designed for Television Band IV & V Applications up to 860 MHz.

FEATURES:

- Common Emitter
- $P_G = 8.5$ dB at 4.0 W/860 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|---------------|---------------------------------|
| I_C | 1.59 A |
| V_{CBO} | 65 V |
| V_{CES} | 65 V |
| V_{EBO} | 3.5 V |
| P_{DISS} | 31.8 W @ $T_C = 25^\circ C$ |
| T_J | $-65^\circ C$ to $+200^\circ C$ |
| T_{STG} | $-65^\circ C$ to $+150^\circ C$ |
| θ_{JC} | $7.0^\circ C/W$ |

PACKAGE STYLE .280 4L STUD


| DIM | 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 | .572 / 14.53 | |
| G | .130 / 3.30 | |
| H | .245 / 6.22 | .255 / 6.48 |
| I | .640 / 16.26 | |
| J | .175 / 4.45 | .217 / 5.51 |
| K | .275 / 6.99 | .285 / 7.24 |

CHARACTERISTICS $T_C = 25^\circ C$

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------------|---|------------|---------|---------|-----------|
| BV_{CEO} | $I_C = 5.0$ mA | 20 | | | V |
| BV_{CES} | $I_C = 10$ mA | 65 | | | V |
| BV_{CBO} | $I_C = 5.0$ mA | 65 | | | V |
| BV_{EBO} | $I_E = 5.0$ mA | 3.5 | | | V |
| I_{CBO} | $V_{CB} = 40$ V | | | 1.0 | mA |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 800$ mA | 20 | | 200 | --- |
| C_{OB} | $V_{CE} = 25$ V $f = 1.0$ MHz | | | 20 | pF |
| P_G IMD_3 | $V_{CE} = 25$ V $I_C = 850$ mA $f = 860$ MHz $P_{OUT} = 4.0$ W | 8.5 -60 | | | dB dBc |