

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

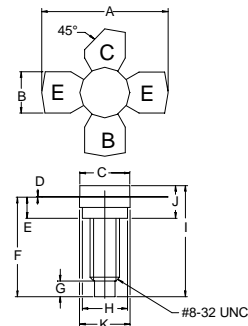
The **ASI PT9700** is Designed for High Power Class C Amplifier, in 225 to 400 MHz Military Communication Equipment.

FEATURES:

- Class C Operation
- $P_G = 13$ dB at 1.0 W/400 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|---------------|------------------------|
| I_C | 2.0 A |
| V_{CBO} | 45 V |
| V_{CEO} | 25 V |
| V_{EBO} | 3.5 V |
| P_{DISS} | 31.8 W @ $T_C = 25$ °C |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| θ_{JC} | 20 °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 $T_C = 25$ °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------|---|---------|---------|---------|---------|
| BV_{CBO} | $I_C = 1.0$ mA | 45 | | | V |
| BV_{CEO} | $I_C = 20$ mA | 24 | | | V |
| BV_{EBO} | $I_E = 0.25$ mA | 3.5 | | | V |
| I_{CBO} | $V_{CB} = 28$ V | | | 0.45 | mA |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 100$ mA | 15 | | 120 | --- |
| C_{ob} | $V_{CB} = 28$ V $f = 1.0$ MHz | | | 5.0 | pF |
| P_G η_D | $V_{CC} = 28$ V $P_{OUT} = 1.0$ W $f = 400$ MHz | 13 | 60 | | dB % |