

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

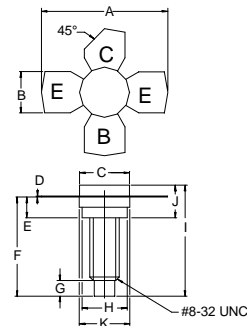
The **ASI 2N5945** is Designed for FM Land Mobile Applications in the 400 to 960 MHz.

FEATURES:

- Common Emitter
- $P_G = 9.0$ dB at 2.0 W/470 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|---------------|----------------------|
| I_C | 0.8 A |
| V_{CBO} | 36 V |
| V_{CEO} | 16 V |
| V_{EBO} | 4.0 V |
| P_{DISS} | 15 W @ $T_C = 25$ °C |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| θ_{JC} | 11.6 °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_{CEO} | $I_C = 100$ mA | 16 | | | V |
| BV_{CES} | $I_C = 100$ mA | 36 | | | V |
| BV_{EBO} | $I_E = 2.0$ mA | 4.0 | | | V |
| I_{CBO} | $V_{CB} = 15$ V | | | 1.0 | mA |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 200$ mA | 20 | --- | --- | --- |
| C_{ob} | $V_{CB} = 12.5$ V $f = 1.0$ MHz | --- | 18 | 25 | pF |
| P_G | $V_{CC} = 12.5$ V $P_{OUT} = 4.0$ W $f = 470$ MHz | 9.0 | 10 | | dB |
| η_c | | 60 | | | % |