

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI PT9701B** is a Common Emitter Device Designed for Class A , AB and C Amplifier Applications in the 225 - 400 MHz Military Communications Band.

FEATURES INCLUDE:

- Gold Metalization
- Emitter Ballasting
- High Gain

MAXIMUM RATINGS

| | |
|-------------------------|-------------------------------|
| I_C | 1.25 A |
| V_{CES} | 45 V |
| P_{DISS} | 14 W @ T _C = 25 °C |
| T_J | -55 °C to +200 °C |
| T_{STG} | -55 °C to +200 °C |
| q_{JC} | 12 °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 | .117/2,97 | .137/3,48 |
| F | .5/2/14,53 | |
| G | .130/3,30 | |
| H | .275/6,99 | .285/7,24 |
| I | 6.40/16,26 | |
| J | .175/4,45 | .21/75,51 |

1 = COLLECTOR 2 = BASE
3 & 4 = EMITTER

CHARACTERISTICS T_C = 25 °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------------|---|---------|---------|---------|------------|
| BV_{CEO} | I _C = 20 mA | 25 | | | V |
| BV_{CES} | I _C = 10 mA | 45 | | | V |
| BV_{EBO} | I _E = 1.0 mA | 3.5 | | | V |
| h_{FE} | V _{CE} = 5.0 V I _C = 200 mA | 15 | | | --- |
| C_{ob} | V _{CB} = 28 V f = 1.0 MHz | | | 7.0 | pF |
| P_G | V _{CE} = 28 V P _{out} = 5.0 W f = 400 MHz | 10 | 12 | | dB |
| h_c | | 50 | 55 | | % |