

RF POWER TRANSISTOR

DESCRIPTION:

The **ASI TAN250A** is a Common Base Transistor Designed for DME, TACAN and IFF Pulse Power Amplifier Applications.

FEATURES INCLUDE:

- Gold Metallization
- Hermetic Package
- Input/Output Matching

MAXIMUM RATINGS

| | |
|-------------------------|--------------------------------|
| I_C | 30 A |
| V_{CB} | 60 V |
| P_{DISS} | 575 W @ T _C = 25 °C |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +200 °C |
| q_{JC} | 0.30 °C/W |

| PACKAGE STYLE | | |
|---------------|----------------------|----------------------|
| | MINIMUM INCHES/MM | MAXIMUM INCHES/MM |
| A | .890/22.61 | .910/23.11 |
| B | .640/16.26 | .660/16.76 |
| C | .053/1.35 | .073/1.854 |
| D | .115/2.921 | .135/3.43 |
| E | .130/3.30 | .150/3.81 |
| F | .100/2.54 | .120/3.048 |
| G | .395/10.03 | .415/10.54 |
| H | .052/1.321 | .072/1.829 |
| I | .440/11.18 | .460/11.68 |
| J | .376/9.550 | .396/10.06 |
| K | .183/4.65 | .203/5.156 |
| L | | .170/4.318 |
| M | | .230/5.842 |
| N | .395/10.03 | .407/10.34 |
| O | .003/0.0762 | .006/0.152 |
| P | .118/2.997 | .131/3.327 |
| Q | .050/1.27 | |

CHARACTERISTICS T_C = 25 °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------------|--|---------|---------|---------|-------|
| BV_{CBO} | I _C = 20 mA | 60 | | | V |
| BV_{CES} | I _C = 25 mA R _{BE} = 10 Ω | 60 | | | V |
| BV_{EBO} | I _E = 20 mA | 4.0 | | | V |
| I_{CBO} | V _{CB} = 50 V | | | 12 | mA |
| h_{FE} | V _{CE} = 5 V I _C = 1.0 A | 20 | | 120 | --- |
| P_{OUT} | V _{CC} = 50 V P _{IN} = 13 W f = 960 to 1215 MHz Pulse Width = 20 μS Duty Cycle = 5 % | 250 | | | W |
| P_G | | 6.0 | 7.0 | | dB |
| h_C | | | 40 | | % |