

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI AVD035P** is a medium power Class C transistor for pulsed L-Band avionics, DME/TACAN Applications.

FEATURES:

- Internal Input Matching Network
- $P_G = 10$ dB at 35 W/1150 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

| | |
|---------------|-------------------|
| I_C | 3.0 A PEAK |
| V_{CB} | 55 V |
| P_{DISS} | 100 W PEAK |
| T_J | -65 °C to +200 °C |
| T_{STG} | -65 °C to +150 °C |
| θ_{JC} | 1.0 °C/W |

PACKAGE STYLE .280 4L PILL (A)

| DIM | MINIMUM inches / mm | MAXIMUM inches / mm |
|-----|------------------------|------------------------|
| A | .095 / 2.41 | .105 / 2.67 |
| B | .195 / 4.95 | .205 / 5.21 |
| C | 1.000 / 25.40 | |
| D | .004 / 0.10 | .007 / 0.18 |
| E | .050 / 1.27 | .065 / 1.65 |
| F | | .145 / 3.68 |
| G | .275 / 6.99 | .285 / 7.21 |

ORDER CODE: ASI10559

CHARACTERISTICS $T_C = 25$ °C

| SYMBOL | TEST CONDITIONS | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|--|---------|---------|---------|-------|
| BV_{CBO} | $I_C = 10$ mA | 65 | | | V |
| BV_{CER} | $I_C = 10$ mA $R_{BE} = 10 \Omega$ | 65 | | | V |
| BV_{EBO} | $I_E = 1$ mA | 3.5 | | | V |
| I_{CES} | $V_{CE} = 50$ V | | | 5.0 | mA |
| h_{FE} | $V_{CE} = 5.0$ V $I_C = 500$ mA | 15 | | 120 | --- |
| P_G | $V_{CC} = 50$ V $P_{OUT} = 35$ W $f = 1025 - 1150$ MHz | 10.7 | 11.2 | | dB |
| η_c | $P_{IN} = 3.0$ W | 43 | 48 | | % |