

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI AVD015P** is Designed for Class C, DME/TACAN Applications up to 1150 MHz.

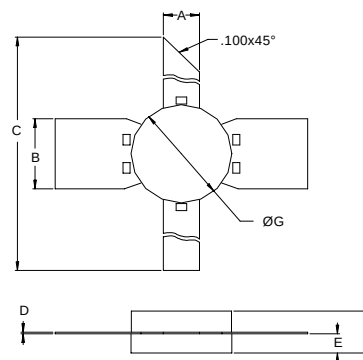
## FEATURES:

- Class C Operation
- $P_G = 10$  dB at 15 W/1150 MHz
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

|               |                   |
|---------------|-------------------|
| $I_C$         | 1.25 A PEAK       |
| $V_{CB}$      | 50 V              |
| $P_{DISS}$    | 50 W PEAK         |
| $T_J$         | -65 °C to +200 °C |
| $T_{STG}$     | -65 °C to +150 °C |
| $\theta_{JC}$ | 2.0 °C/W          |

## PACKAGE STYLE .280 4L PILL (A)



| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>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: ASI10557**

## CHARACTERISTICS $T_C = 25\text{ °C}$

| 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     |
| $BV_{EBO}$ | $I_E = 1.0$ mA                                         | 3.5     |         |         | V     |
| $I_{CES}$  | $V_{CB} = 50$ V                                        |         |         | 2.5     | mA    |
| $h_{FE}$   | $V_{CE} = 5.0$ V $I_C = 500$ mA                        | 15      |         | 120     | ---   |
| $P_G$      | $V_{CC} = 50$ V $P_{OUT} = 15$ W $f = 1025 - 1150$ MHz | 10      |         |         | dB    |
| $\eta_C$   |                                                        | 35      |         |         | %     |