# AVD090P

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI AVD090P** is Designed for Class C, DME/TACAN Applicastions up to 1150 MHz.

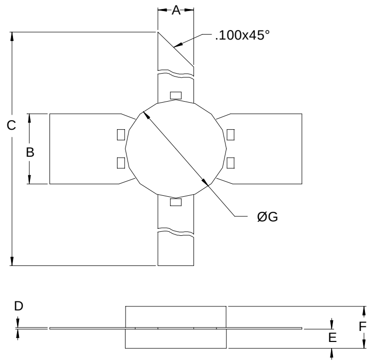
## FEATURES:

- Internal Input Matching Network
- **$P_G$** = 8.5 dB at 90 W/1150 MHz
- ***Omnigold***™ Metalization System

## MAXIMUM RATINGS

| | |
|---|---|
| **$I_C$** | 6.5 A PEAK |
| **$V_{CB}$** | 55 V |
| **$P_{DISS}$** | 250 W PEAK |
| **$T_J$** | -65 °C to +200 °C |
| **$T_{STG}$** | -65 °C to +150 °C |
| **$\theta_{JC}$** | 0.6 °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: ASI10563**

## 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 Ω | 65 | | | **V** |
| **$BV_{EBO}$** | $I_E$ = 1.0 mA | 3.5 | | | **V** |
| **$I_{CES}$** | $V_{CB}$ = 50 V | | | 6.25 | **mA** |
| **$h_{FE}$** | $V_{CE}$ = 5.0 V $I_C$ = 1.0 A | 10 | | 100 | **---** |
| | | | | | |
| **$P_G$**<br>**$\eta_C$** | $V_{CC}$ = 50 V $P_{OUT}$ = 90 W f = 1025 - 1150 MHz | 8.5<br>35 | | | **dB**<br>**%** |