

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI AVD250** is Designed for Class C, DME/TACAN Applications up to 1150 MHz.

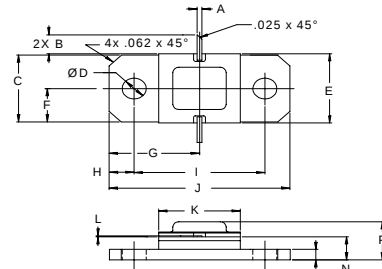
## FEATURES:

- Internal Input/Output Matching Networks
- $P_G = 6.2$  dB at 250 W/1150 MHz
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

|               |                                 |
|---------------|---------------------------------|
| $I_C$         | 17.8 A                          |
| $V_{CC}$      | 55 V                            |
| $P_{DISS}$    | 600 W @ $T_C \leq 80^\circ C$   |
| $T_J$         | $-65^\circ C$ to $+250^\circ C$ |
| $T_{STG}$     | $-65^\circ C$ to $+200^\circ C$ |
| $\theta_{JC}$ | 0.2 $^\circ C/W$                |

## PACKAGE STYLE .400 2NL FLG



| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>inches / mm |
|-----|------------------------|------------------------|
| A   | .020 / 0.51            | .030 / 0.76            |
| B   | .100 / 2.54            |                        |
| C   | .376 / 9.55            | .396 / 10.06           |
| D   | .110 / 2.79            | .130 / 3.30            |
| E   | .395 / 10.03           | .407 / 10.34           |
| F   | .193 / 4.90            |                        |
| G   | .450 / 11.43           |                        |
| H   | .125 / 3.18            |                        |
| I   | .640 / 16.26           | .660 / 16.76           |
| J   | .890 / 22.61           | .910 / 23.11           |
| K   | .395 / 10.03           | .415 / 10.54           |
| L   | .004 / 0.10            | .007 / 0.18            |
| M   | .052 / 1.32            | .072 / 1.83            |
| N   | .118 / 3.00            | .131 / 3.33            |
| P   |                        | .230 / 5.84            |

## ORDER CODE: ASI10565

## CHARACTERISTICS $T_C = 25^\circ C$

| SYMBOL            | TEST CONDITIONS                                         | MINIMUM   | TYPICAL | MAXIMUM | UNITS   |
|-------------------|---------------------------------------------------------|-----------|---------|---------|---------|
| $BV_{CBO}$        | $I_C = 10$ mA                                           | 65        |         |         | V       |
| $BV_{CER}$        | $I_C = 25$ mA $R_{BE} = 10 \Omega$                      | 65        |         |         | V       |
| $BV_{EBO}$        | $I_E = 1.0$ mA                                          | 3.5       |         |         | V       |
| $I_{CES}$         | $V_{CE} = 50$ V                                         |           |         | 25      | mA      |
| $h_{FE}$          | $V_{CE} = 5.0$ V $I_C = 1.0$ A                          | 15        |         | 120     | ---     |
| $P_G$<br>$\eta_c$ | $V_{CC} = 50$ V $P_{OUT} = 250$ W $f = 1025 - 1150$ MHz | 6.2<br>40 |         |         | dB<br>% |