

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

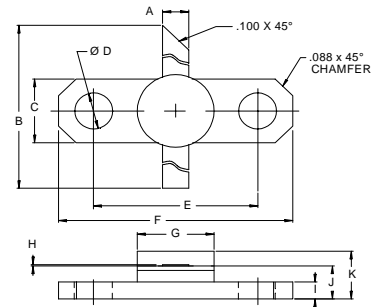
The **ASI AVD035F** is a medium power Class C transistor for pulsed L-Band avionics, DME/TACAN Applications.

**FEATURES:**

- Class C Operation
- $P_G = 10$  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 |
| $\theta_{JC}$ | 1.0 °C/W          |

**PACKAGE STYLE .250 2L FLG (B)**


| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>inches / mm |
|-----|------------------------|------------------------|
| A   | .095 / 2.41            | .105 / 2.67            |
| B   | 1.050 / 26.67          |                        |
| C   | .245 / 6.22            | .255 / 6.48            |
| D   | .120 / 3.05            | .140 / 3.56            |
| E   | .552 / 14.02           | .572 / 14.53           |
| F   | .790 / 20.07           | .810 / 20.57           |
| G   |                        | .285 / 7.24            |
| H   | .003 / 0.08            | .007 / 0.18            |
| I   | .052 / 1.32            | .072 / 1.83            |
| J   | .120 / 3.05            | .130 / 3.30            |
| K   |                        | .210 / 5.33            |

**ORDER CODE: ASI10558**
**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     |
| $I_{CES}$  | $V_{CE} = 50$ 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    |
| $\eta_C$   | $P_{IN} = 3.0$ W                                       | 43      | 48      |         | %     |