

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

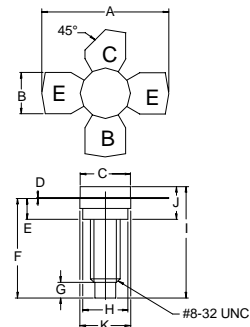
The **ASI UML5** is Designed for High Power Class C Amplifier in, 225 to 400 MHz Military Communication Equipment.

**FEATURES:**

- Class C Operation
- $P_G = 10$  dB at 5.0 W/400 MHz
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

|               |                       |
|---------------|-----------------------|
| $I_C$         | 10 A                  |
| $V_{CB}$      | 60 V                  |
| $V_{CE}$      | 35 V                  |
| $P_{DISS}$    | 140 W @ $T_C = 25$ °C |
| $T_J$         | -65 °C to +200 °C     |
| $T_{STG}$     | -65 °C to +150 °C     |
| $\theta_{JC}$ | 11 °C/W               |

**PACKAGE STYLE .280 4L STUD**


| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>inches / mm |
|-----|------------------------|------------------------|
| A   | 1.010 / 25.65          | 1.055 / 26.80          |
| B   | .220 / 5.59            | .230 / 5.84            |
| C   | .270 / 6.86            | .285 / 7.24            |
| D   | .003 / 0.08            | .007 / 0.18            |
| E   | .117 / 2.97            | .137 / 3.48            |
| F   | .572 / 14.53           |                        |
| G   | .130 / 3.30            |                        |
| H   | .245 / 6.22            | .255 / 6.48            |
| I   | .640 / 16.26           |                        |
| J   | .175 / 4.45            | .217 / 5.51            |
| K   | .275 / 6.99            | .285 / 7.24            |

**ORDER CODE: ASI10692**
**CHARACTERISTICS**  $T_C = 25$  °C

| SYMBOL            | TEST CONDITIONS                                 | MINIMUM | TYPICAL | MAXIMUM | UNITS   |
|-------------------|---|---------|---------|---------|---------|
| $BV_{CEO}$        | $I_C = 50$ mA                                   | 35      |         |         | V       |
| $BV_{CER}$        | $I_C = 50$ mA $R_{BE} = 10$ Ω                   | 60      |         |         | V       |
| $BV_{EBO}$        | $I_E = 10$ mA                                   | 4.0     |         |         | V       |
| $I_{CES}$         | $V_E = 28$ V                                    |         |         | 5.0     | mA      |
| $h_{FE}$          | $V_{CE} = 5.0$ V $I_C = 1.0$ A                  | 10      |         | 100     | ---     |
| $C_{ob}$          | $V_{CB} = 28$ V $f = 1.0$ MHz                   |         |         | 10      | pF      |
| $P_G$<br>$\eta_D$ | $V_{CC} = 28$ V $P_{OUT} = 5.0$ W $f = 400$ MHz | 10      | 60      |         | dB<br>% |