

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI MRF1004MB** is Designed for Class B and C, TACAN, IFF, and DME Applications up to 1090 MHz.

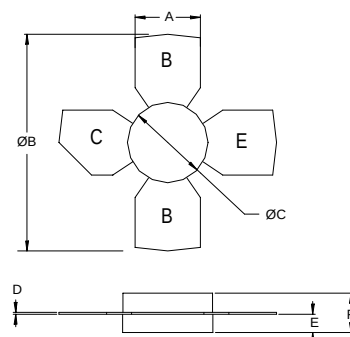
## FEATURES:

- Class B and C Operation
- Common Base
- $P_G = 10$  dB at 4.0 W/1090 MHz
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

|               |                                             |
|---------------|---------------------------------------------|
| $I_C$         | 250 mA                                      |
| $V_{CE}$      | 20 V                                        |
| $P_{DISS}$    | 7.0 W @ $T_C = 25^\circ\text{C}$            |
| $T_J$         | $-65^\circ\text{C}$ to $+200^\circ\text{C}$ |
| $T_{STG}$     | $-65^\circ\text{C}$ to $+150^\circ\text{C}$ |
| $\theta_{JC}$ | 25.0 $^\circ\text{C/W}$                     |

## PACKAGE STYLE .280 4L PILL



| DIM | MINIMUM<br>inches / mm | MAXIMUM<br>inches / mm |
|-----|------------------------|------------------------|
| A   | .220 / 5.59            | .230 / 5.84            |
| B   |                        | 1.055 / 26.80          |
| C   | .275 / 6.99            | .285 / 7.24            |
| D   | .004 / 0.10            | .006 / 0.15            |
| E   | .050 / 1.27            | .060 / 1.52            |
| F   | .118 / 3.00            | .130 / 3.30            |

## CHARACTERISTICS $T_C = 25^\circ\text{C}$

| SYMBOL     | TEST CONDITIONS                                  | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|--------------------------------------------------|---------|---------|---------|-------|
| $BV_{CBO}$ | $I_C = 5.0$ mA                                   | 50      |         |         | V     |
| $BV_{CEO}$ | $I_C = 5.0$ mA                                   | 20      |         |         | V     |
| $BV_{EBO}$ | $I_E = 1.0$ mA                                   | 3.5     |         |         | V     |
| $I_{CBO}$  | $V_{CB} = 35$ V                                  |         |         | 0.5     | mA    |
| $h_{FE}$   | $V_{CE} = 5.0$ V $I_C = 75$ mA                   | 10      |         | 100     | ---   |
| $P_G$      | $V_{CC} = 35$ V $P_{OUT} = 4.0$ W $f = 1090$ MHz | 10      | 11      |         | dB    |
| $\eta_C$   |                                                  | 40      | 45      |         | %     |