

# NPN SILICON LOW POWER TRANSISTOR

**DESCRIPTION:**

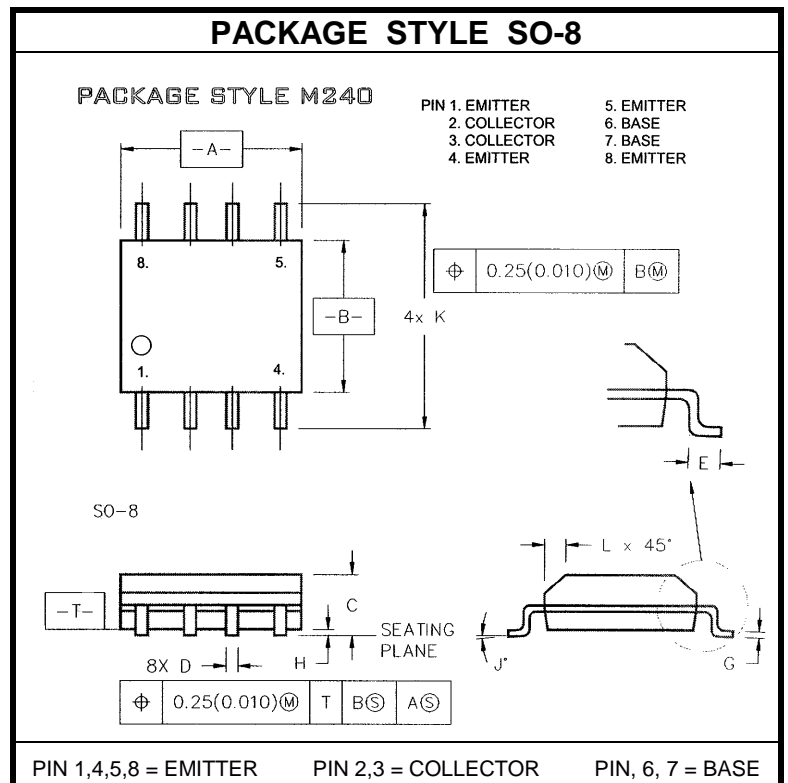
The **ASI MRF8372** is Designed for Wideband large signal stages in the 800 MHz and UHF frequency ranges.

**FEATURES:**

- $P_{OUT} = 750 \text{ mW}$
- $P_G = 8.0 \text{ dB min.}$
- $\eta = 60\%$  typical
- R1 suffix – Tape and Reel, 500 units
- R2 suffix – Tape and Reel, 2500 units

**MAXIMUM RATINGS**

|               |                                  |
|---------------|----------------------------------|
| $I_C$         | 200 mA                           |
| $V_{CB0}$     | 30 V                             |
| $V_{CEO}$     | 16 V                             |
| $V_{EBO}$     | 3.0 V                            |
| $P_{DISS}$    | 2.2 W @ $T_C = 25^\circ\text{C}$ |
| $T_J$         | -65 °C to +200 °C                |
| $T_{STG}$     | -65 °C to +150 °C                |
| $\theta_{JC}$ | 45 °C/W                          |


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

| SYMBOL     | TEST CONDITIONS           |                            | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|------------|---------------------------|----------------------------|---------|---------|---------|-------|
| $BV_{CES}$ | $I_C = 5.0 \text{ mA}$    |                            | 30      |         |         | V     |
| $BV_{CEO}$ | $I_C = 5.0 \text{ mA}$    |                            | 16      |         |         | V     |
| $BV_{EBO}$ | $I_E = 0.1 \text{ mA}$    |                            | 3.0     |         |         | V     |
| $I_{CES}$  | $V_{CE} = 15 \text{ V}$   |                            |         |         | .0      | mA    |
| $h_{FE}$   | $V_{CE} = 5.0 \text{ V}$  | $I_C = 50 \text{ mA}$      | 30      |         | 200     | ---   |
| $C_{OB}$   | $V_{CB} = 15 \text{ V}$   | $f = 1.0 \text{ MHz}$      |         |         | 2.75    | pF    |
| $P_G$      | $V_{CE} = 12.5 \text{ V}$ | $P_{OUT} = 0.75 \text{ W}$ | 8.0     | 9.5     |         | dB    |
| $\eta_c$   |                           | $f = 870 \text{ MHz}$      | 50      | 60      |         | %     |