

NPN SILICON RF MICROWAVE TRANSISTOR

DESCRIPTION:

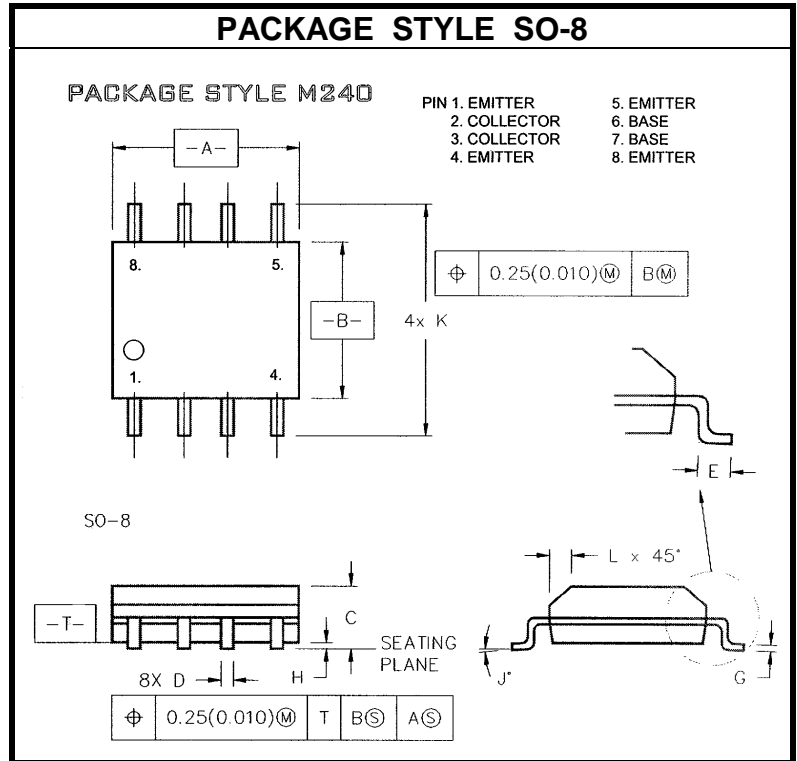
The **ASI MRF5812** is Designed for high current, low power, low noise, amplifiers up to 1.0 GHz.

FEATURES:

- Low Noise – 2.5 dB @ 500 MHz
- Ftau – 5.0 GHz @ 10 V, 75 mA
- Cost Effective SO-8 package

MAXIMUM RATINGS

| | |
|-------------------------|---------------------------------|
| I_C | 200 mA |
| V_{CB0} | 30 V |
| V_{CEO} | 15 V |
| V_{EBO} | 2.5 V |
| P_{DISS} | 1.25 W @ T _C = 25 °C |


CHARACTERISTICS T_C = 25 °C

| SYMBOL | TEST CONDITIONS | | MINIMUM | TYPICAL | MAXIMUM | UNITS |
|-------------------------------------|-------------------------|------------------------|-------------|---------|---------|-------|
| BV_{CB0} | I _C = 1.0 mA | | 30 | | | V |
| BV_{CEO} | I _C = 5.0 mA | | 15 | | | V |
| BV_{EBO} | I _E = 0.1 mA | | 2.5 | | | V |
| I_{CB0} | V _{CB} = 15 V | | | | 0.1 | mA |
| I_{EBO} | V _{CE} = 2.0 V | | | | 0.1 | mA |
| h_{FE} | V _{CE} = 5.0 V | I _C = 50 mA | 50 | | 200 | --- |
| C_{OB} | V _{CB} = 10 V | f = 1.0 MHz | | 1.4 | 2.0 | pF |
| F_{TAU} | V _{CE} = 10 V | I _C = 75 mA | | 5.0 | | GHz |
| NF_{min} | V _{CE} = 10 V | I _C = 50 mA | f = 500 MHz | 2.0 | 3.0 | dB |
| G_{NF} | | | | 13 | 15.5 | % |
| G_{U max} | | | | 17.8 | | dB |
| MSG | | | | 20 | | dB |
| S₂₁ ² | | | | 15 | | dB |