

# NPN SILICON RF TRANSISTOR

**DESCRIPTION:**

The **ASI MRF571** is Designed for low-noise, wide dynamic range front end amplifiers.

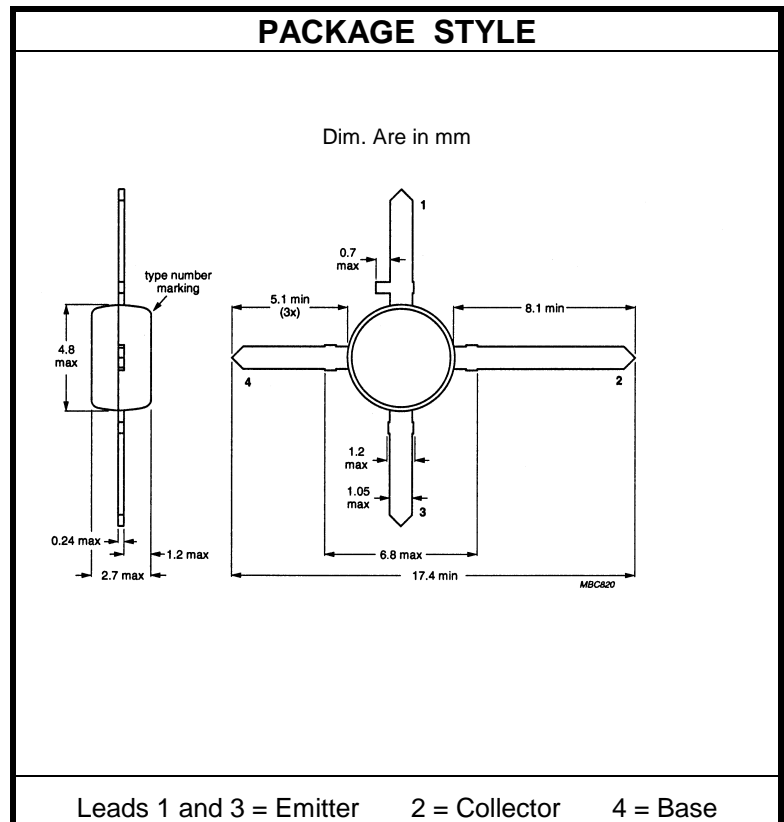
Applications up to 2.0 GHz.

**FEATURES:**

- Low Noise Figure
- High Gain
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	70 mA
$V_{CB0}$	20 V
$V_{CEO}$	10 V
$V_{EBO}$	3.0 V
$P_{DISS}$	1.0 W @ $T_C = 25\text{ }^\circ\text{C}$
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C


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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CB0}$	$I_C = 0.1\text{ mA}$			20			V
$BV_{CEO}$	$I_C = 1.0\text{ mA}$			10			V
$BV_{EBO}$	$I_E = 500\text{ }\mu\text{A}$			2.5			V
$I_{CB0}$	$V_{CB} = 8.0\text{ V}$					10	$\mu\text{A}$
$h_{FE}$	$V_{CE} = 5.0\text{ V}$	$I_C = 30\text{ mA}$		50		300	---
$C_{cb}$	$V_{CB} = 6.0\text{ V}$	$f = 1.0\text{ MHz}$			0.7	1.0	pF
$G_{NF}$	$V_{CE} = 6.0\text{ V}$	$I_C = 10\text{ mA}$	$f = 0.5\text{ GHz}$		16.5		dB
			$f = 1.0\text{ GHz}$	10	12		
NF	$V_{CE} = 6.0\text{ V}$	$I_C = 10\text{ mA}$	$f = 0.5\text{ GHz}$		1.0	2.0	dB
			$f = 1.0\text{ GHz}$		1.5		
			$f = 2.0\text{ GHz}$		2.8		