

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

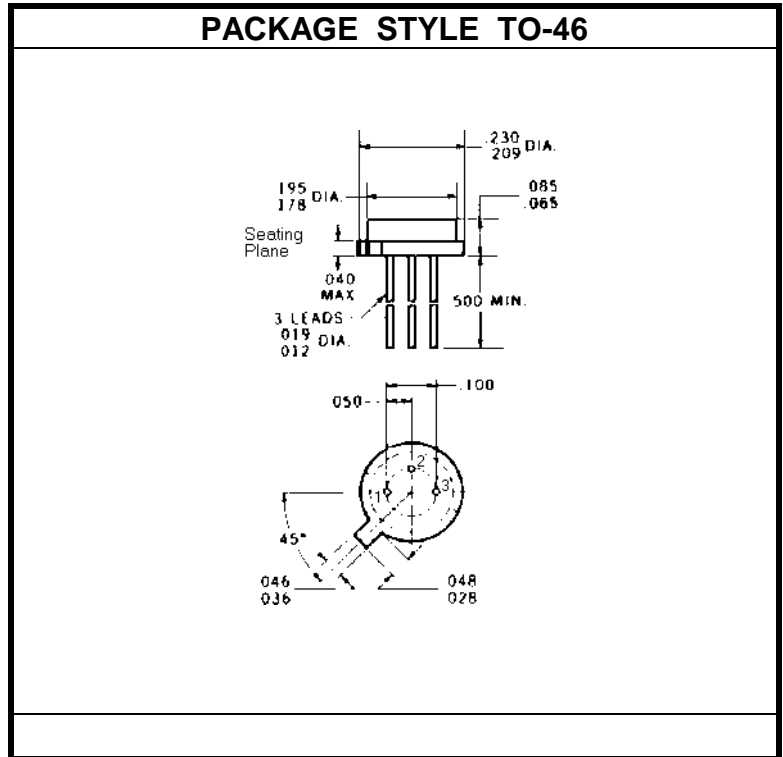
The **ASI MRF604** is Designed for General Purpose Oscillator Applications up to 175 MHz.

**FEATURES:**

- $V_{CC} = 12.5\text{ V}$
- $P_{OUT} = 1.0\text{ W}$
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	150 mA
$V_{CB}$	40 V
$P_{DISS}$	2.0 W @ $T_C = 25\text{ }^\circ\text{C}$
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +200 °C
$\theta_{JC}$	88 °C/W


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

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 5.0\text{ mA}$			20			V
$BV_{CBO}$	$I_C = 100\text{ }\mu\text{A}$			40			V
$BV_{EBO}$	$I_E = 100\text{ }\mu\text{A}$			3.5			V
$I_{CEO}$	$V_{CE} = 12\text{ V}$					1.0	mA
$h_{FE}$	$V_{CE} = 5.0\text{ V}$	$I_C = 50\text{ mA}$		20		200	---
$C_{OB}$	$V_{CB} = 12.5\text{ V}$	$f = 1.0\text{ MHz}$				3.5	pF
$\eta_C$	$V_{CC} = 12.5\text{ V}$	$P_{OUT} = 1.0\text{ W}$	$f = 175\text{ MHz}$	50			%
$P_G$	$V_{CC} = 12.5\text{ V}$	$P_{OUT} = 1.0\text{ W}$	$f = 175\text{ MHz}$	10			dB
$f_t$	$V_{CE} = 10\text{ V}$	$I_E = 50\text{ mA}$	$f = 200\text{ MHz}$	800			MHZ