

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

The **ASI MRF426** is Designed for high gain amplifier applications up to 30 MHz.

**FEATURES:**

- $P_G = 22$  dB min. at 25 W/30 MHz
- $IMD_3 = -30$  dBc max. at 25 W<sub>(PEP)</sub>
- **Omnigold™** Metalization System
- Available as matched pairs.

**MAXIMUM RATINGS**

$I_C$	3.0 A
$V_{CBO}$	65 V
$V_{CEO}$	35 V
$V_{EBO}$	4.0 V
$P_{DISS}$	70 W @ $T_C = 25^\circ C$
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	2.5 °C/W

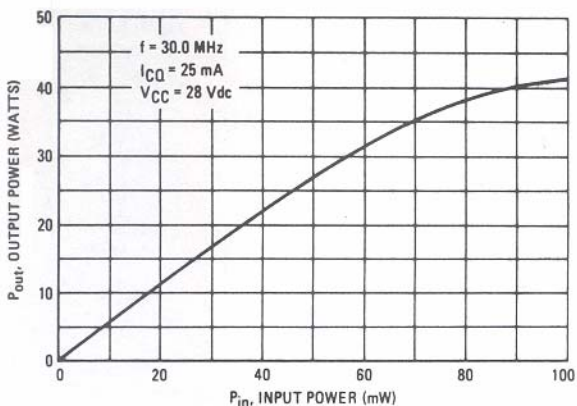
**PACKAGE STYLE .380 4L FLG**

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B	.785 / 19.94	
C	.720 / 18.29	.730 / 18.54
D	.970 / 24.64	.980 / 24.89
E		.385 / 9.78
F	.004 / 0.10	.006 / 0.15
G	.085 / 2.16	.105 / 2.67
H	.160 / 4.06	.180 / 4.57
I		.280 / 7.11
J	.240 / 6.10	.255 / 6.48

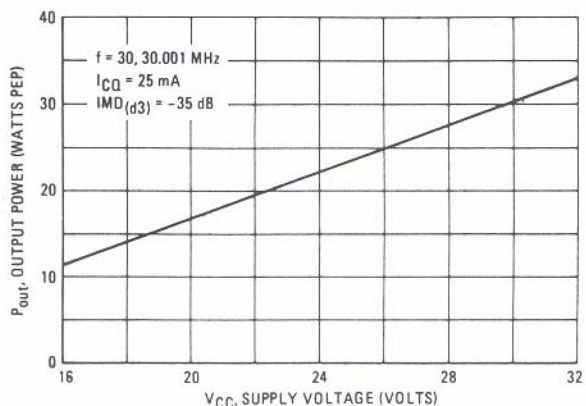
**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CBO}$	$I_C = 50$ mA	65			V
$BV_{CEO}$	$I_C = 50$ mA	35			V
$BV_{EBO}$	$I_E = 10$ mA	4.0			V
$I_{CES}$	$V_{CE} = 28$ V			10	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 1.0$ A	10		200	---
$C_{OB}$	$V_{CB} = 30$ V $f = 1.0$ MHz			80	pF
$G_P$	$V_{CE} = 28$ V $P_{OUT} = 25$ W <sub>(PEP)</sub> $f = 30$ MHz	22			dB
$\eta_C$		35			%
$IMD_3$				-30	dBc

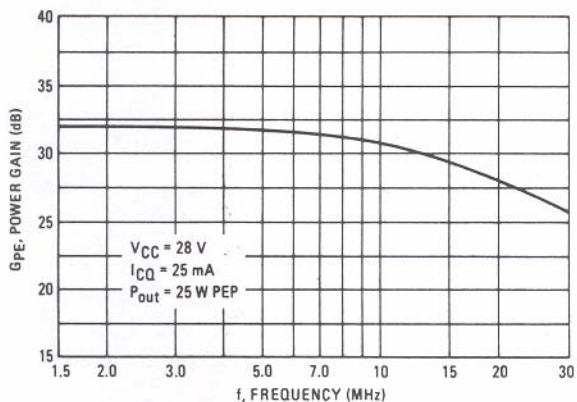
**FIGURE 2 – OUTPUT POWER versus INPUT POWER**



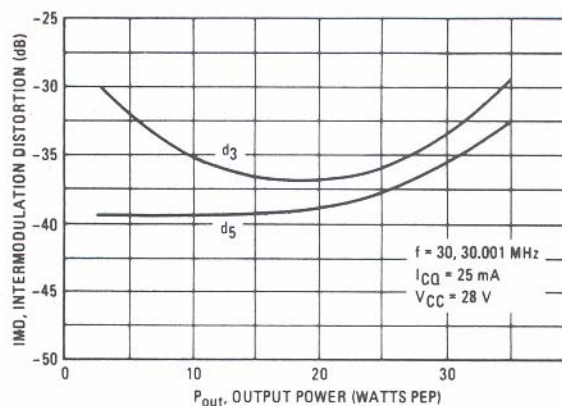
**FIGURE 3 – OUTPUT POWER versus SUPPLY VOLTAGE**



**FIGURE 4 – POWER GAIN versus FREQUENCY**



**FIGURE 5 – INTERMODULATION DISTORTION versus OUTPUT POWER**



**FIGURE 6 – DC SAFE OPERATING AREA**

