NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI 3003** is a common base transistor capable of providing 3.0 W Class-C RF output power @ 3.0 GHz.

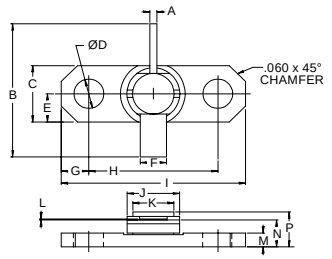
FEATURES:

- P_G = 6.0 dB min. at 3 W / 3,000 MHz
- Difused Ballast Resistor
- ***Omnigold***™ Metalization System

MAXIMUM RATINGS

I_C	60 mA
V_{CC}	30 V
P_{DISS}	10 W @ T_C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	17 °C/W

PACKAGE STYLE .250 2L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.028 / 0.71	.032 / 0.81
B	.740 / 18.80	
C	.245 / 6.22	.255 / 6.48
D	.128 / 3.25	.132 / 3.35
E	.125 / 3.18	
F	.110 / 2.79	.117 / 2.97
G	.117 / 2.97	
H	.560 / 14.22	.570 / 14.48
I	.790 / 20.07	.810 / 20.57
J	.225 / 5.72	.235 / 5.97
K	.165 / 4.19	.185 / 4.70
L	.003 / 0.08	.007 / 0.18
M	.058 / 1.47	.068 / 1.73
N	.119 / 3.02	.135 / 3.43
P	.149 / 3.78	.187 / 4.75

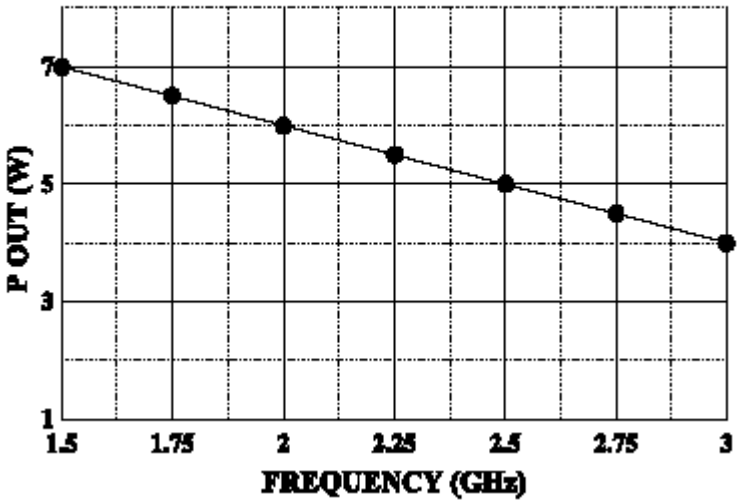
ORDER CODE: ASI10539

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	I_C = 1.0 mA			45			V
BV_{CER}	I_C = 5.0 mA	R_{BE} = 10 Ω		45			V
BV_{EBO}	I_E = 10 mA			3.5			V
I_{CBO}	V_{CB} = 28 V					0.5	mA
h_{FE}	V_{CE} = 5.0 V	I_C = 200 mA		30		300	---
C_{OB}	V_{CB} = 28 V		f = 1.0 MHz			5.0	pF
P_G η_C VSWR	V_{CC} = 28 V W	P_{OUT} = 3.0 W	f = 3.0 GHz P_{IN} = 0.75	6.0	30	 30:1	dB % ---

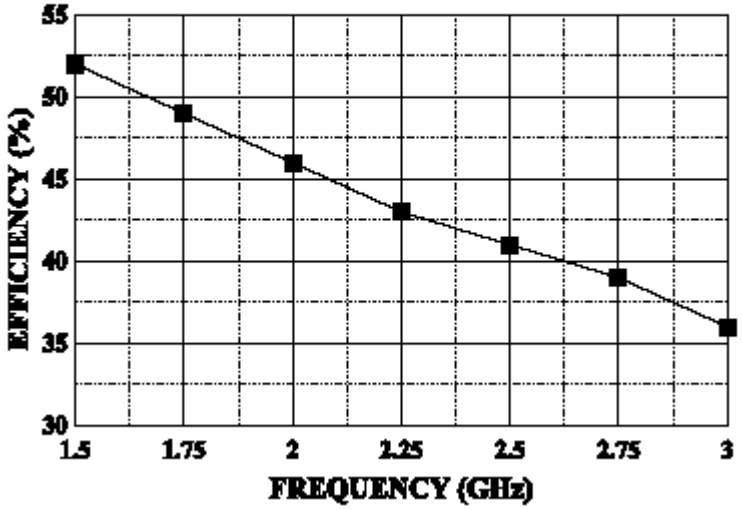
SATURATED POWER OUTPUT VS FREQUENCY

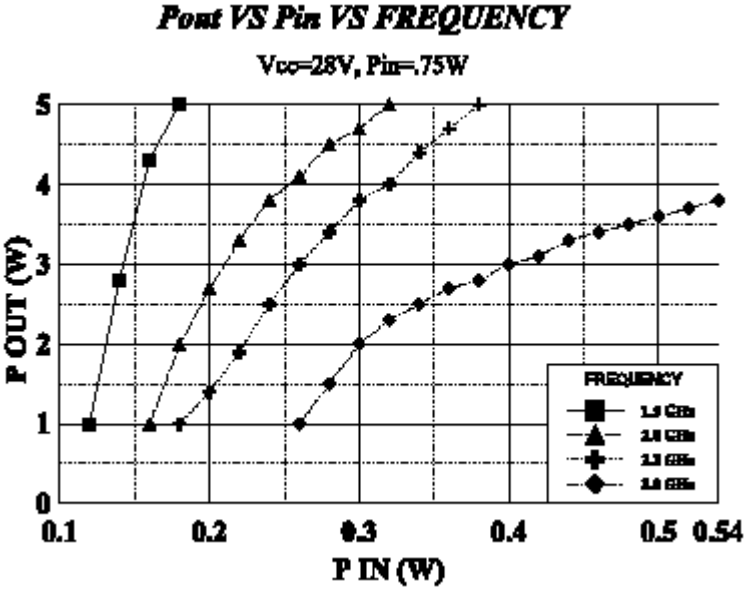
Vcc=28V, Pin=.75W

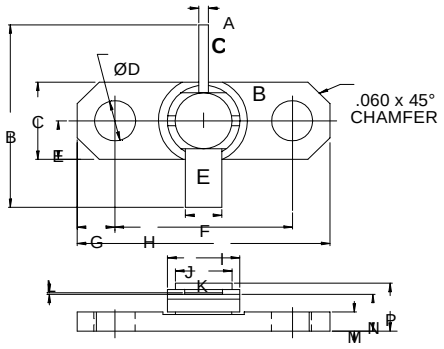


EFFICIENCY VS FREQUENCY

Pout=3W, Vcc=28V







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