



1000MP

0.6 Watts, 18 Volts

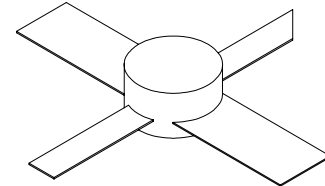
1150 MHz

GENERAL DESCRIPTION

The 1000MP is a COMMON EMITTER transistor capable of providing 0.6 Watt of Class A, RF output power to 1150 MHz. This transistor is specifically designed for general Class A amplifier applications. It utilizes gold metalization and diffused ballasting to provide high reliability and supreme ruggedness.

CASE OUTLINE

55FW



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation

Device Dissipation @ 25°C 5.3 W

Maximum Voltage and Current

Collector to Base Voltage (BV_{ces}) 45 V

Emitter to Base Voltage (BV_{ebo}) 3.5 V

Collector Current (I_c) 300 mA

Maximum Temperatures

Storage Temperature -40 to +150 °C

Operating Junction Temperature +200 °C

ELECTRICAL CHARACTERISTICS @ 25°C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P_{out}	Power Output	F = 1150 MHz V_{cc} = 18 Volts	0.6			W
P_{in}	Power Input				0.05	W
P_g	Power Gain		10.8			dB
F_t	Transition Frequency			3.7		GHz
VSWR	Load Mismatch Tolerance				10:1	

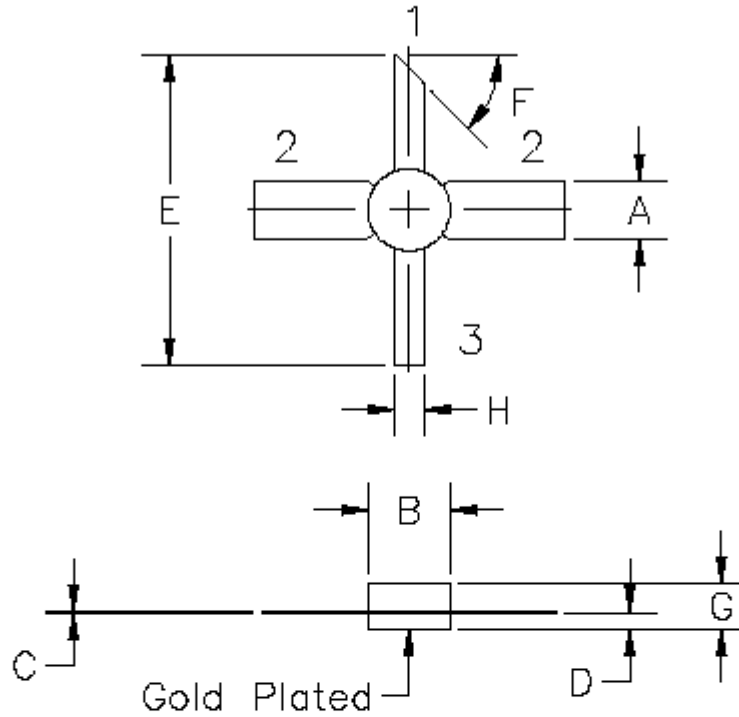
FUNCTIONAL CHARACTERISTICS @ 25°C

BV_{ebo}	Emitter to Base Breakdown	$I_e = 1$ mA	3.5			V
BV_{cbo}	Collector to Base Breakdown	$I_c = 1$ mA	40			V
I_{ces}	Collector to Emitter Leakage	$V_{ce} = 28$ V			1	mA
h_{FE}	DC - Current Gain	$V_{ce} = 5$ V, $I_c = 100$ mA	15			
C_{ob}	Capacitance	$V_{cb} = 28$ V, $f = 1$ MHz		2.0	3.0	pF
θ_{jc}^1	Thermal Resistance				33	°C/W

Note 1: At rated output power

Rev A: Updated June 2009

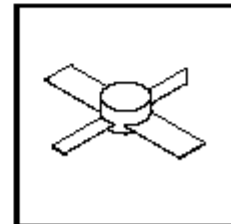
1000MP CASE DRAWING:



STYLE 1:
PIN1 = COLLECTOR
2 = BASE (2X)
3 = EMITTER

STYLE 2:
PIN1 = COLLECTOR
2 = EMITTER (2X)
3 = BASE

DIM	MILLIMETER	±TOL	INCHES	±TOL
A	5.08	.13	.200	.005
B	7.11 DIA	.13	.280 DIA	.005
C	0.13	.02	.005	.001
D	1.40	.13	.055	.005
E	26.92	.64	1.060	.025
F	45°	5°	45°	5°
G	3.94	REF	.155	REF
H	2.54	.13	.100	.005



DWG NO.

55FW

1000MP TEST CIRCUIT:

