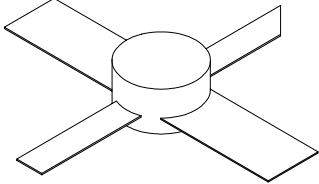




1004MP

4 Watts, 35 Volts

Pulsed Avionics, 960 to 1215 MHz

<p>GENERAL DESCRIPTION</p> <p>The 1004MP is a COMMON BASE transistor capable of providing 4 Watts of Pulsed, RF output power in the band 960 to 1215 MHz. This transistor is specifically designed for pulsed Avionics amplifier applications. It utilizes gold metalization and low thermal resistance packaging to provide high reliability and supreme ruggedness.</p>	<p>CASE OUTLINE 55FW-1</p> 
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation Device Dissipation @ 25°C 7 W</p> <p>Maximum Voltage and Current Collector to Base Voltage (BV_{ces}) 50 V Emitter to Base Voltage (BV_{ebo}) 3.5 V Collector Current (I_c) 300 mA</p> <p>Maximum Temperatures Storage Temperature -40 to +150 °C Operating Junction Temperature +200 °C</p>	

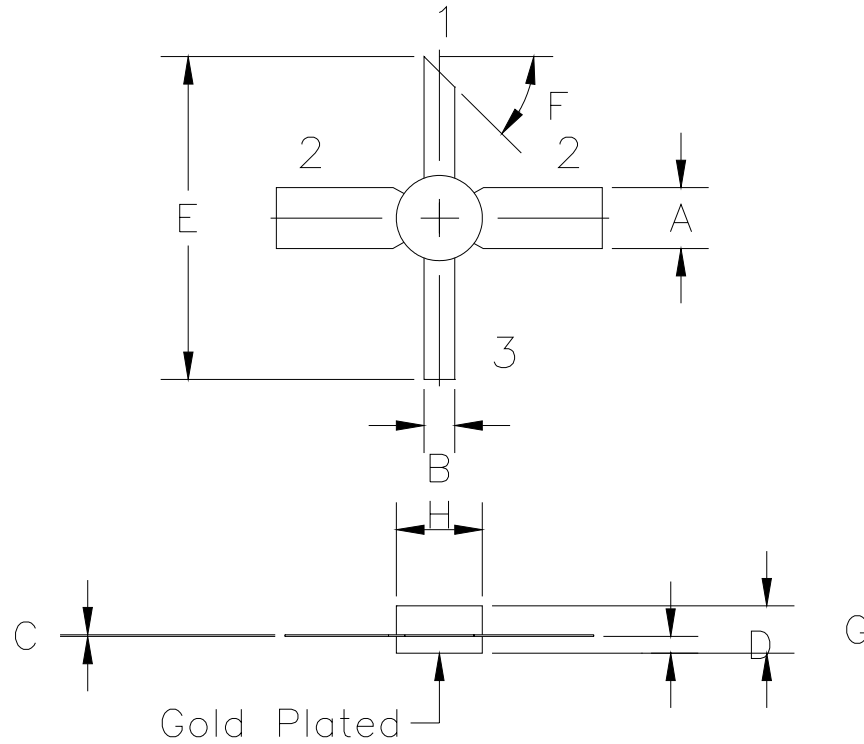
ELECTRICAL CHARACTERISTICS @ 25°C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P _{out}	Power Output	F = 1090 MHz V _{cc} = 35 Volts PW = 10µs, DF = 1%	4.0	4.5		W
P _{in}	Power Input				0.5	W
P _g	Power Gain		7.0	9.0		dB
η _c	Collector Efficiency		40	45		%
VSWR	Load Mismatch Tolerance				30:1	

FUNCTIONAL CHARACTERISTICS @ 25°C

BV _{ebo}	Emitter to Base Breakdown	I _e = 1 mA	3.5			V
BV _{ces}	Collector to Emitter Breakdown	I _c = 10 mA	50			V
h _{FE}	DC – Current Gain	V _{ce} = 5V, I _c = 100 mA	20			
C _{ob}	Capacitance	V _{cb} = 28V, f = 1 MHz		3.3	5.0	pF
θ _{jc} ¹	Thermal Resistance				25	°C/W

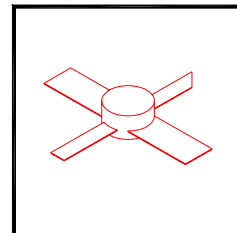
1004MP



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



CHz TECHNOLOGY
 RF - MICROWAVE SILICON POWER TRANSISTORS

DWG NO.

55FW