



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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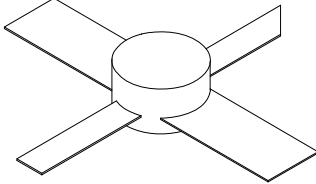




# 1004MP

4 Watts, 35 Volts

Pulsed Avionics, 960 to 1215 MHz

<p><b>GENERAL DESCRIPTION</b></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><b>CASE OUTLINE</b> <b>55FW-1</b></p> 
<p><b>ABSOLUTE MAXIMUM RATINGS</b></p> <p><b>Maximum Power Dissipation</b> Device Dissipation @ 25°C                      7 W</p> <p><b>Maximum Voltage and Current</b> Collector to Base Voltage (BV<sub>ces</sub>)                      50 V Emitter to Base Voltage (BV<sub>ebo</sub>)                      3.5 V Collector Current (I<sub>c</sub>)                                      300 mA</p> <p><b>Maximum Temperatures</b> Storage Temperature                                      -40 to +150 °C Operating Junction Temperature                      +200 °C</p>	

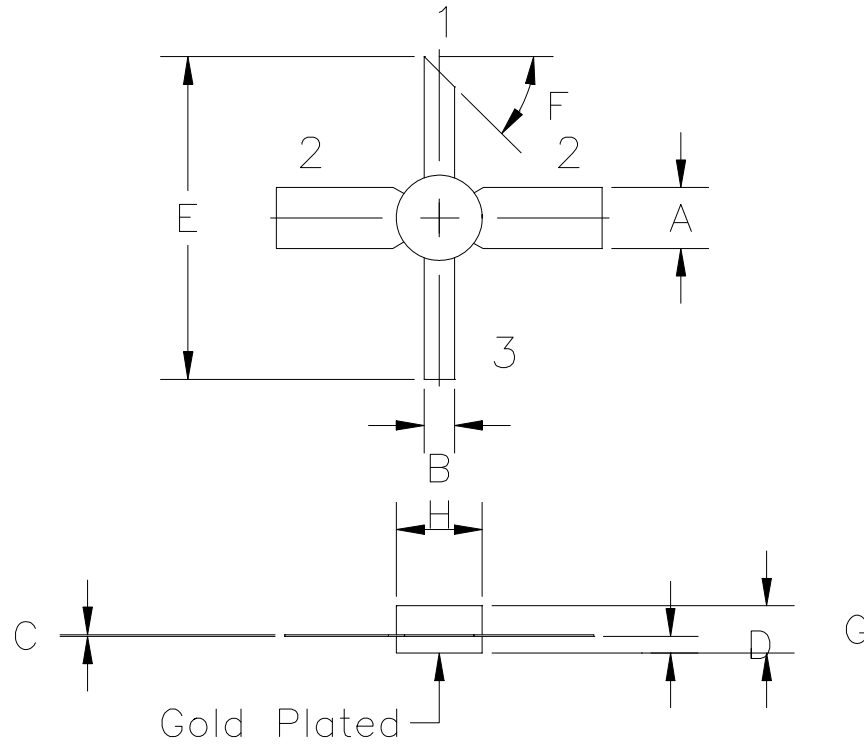
**ELECTRICAL CHARACTERISTICS @ 25°C**

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

**FUNCTIONAL CHARACTERISTICS @ 25°C**

BV <sub>ebo</sub>	Emitter to Base Breakdown	I <sub>e</sub> = 1 mA	3.5			V
BV <sub>ces</sub>	Collector to Emitter Breakdown	I <sub>c</sub> = 10 mA	50			V
h <sub>FE</sub>	DC – Current Gain	V <sub>ce</sub> = 5V, I <sub>c</sub> = 100 mA	20			
C <sub>ob</sub>	Capacitance	V <sub>cb</sub> = 28V, f = 1 MHz		3.3	5.0	pF
θ <sub>jc</sub> <sup>1</sup>	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

