

## *1090MP*

90 Watts, 50 Volts, Class C Avionics 1025 - 1150 MHz

<b>GENERAL DESCRIPTION</b> The 1090MP is a COMMON BASE bipolar transsystems in the frequency band 1025-1150 MHz metallization for proven highest MTTF. The transbroadband capability. Low thermal resistant temperature, extends life.	2. The device has gold thin-film sistor includes input prematch for	CASE OUTLINE 55FW-1
<b>ABSOLUTE MAXIMUM RATINGS</b> Maximum Power Dissipation @ 25°C <sup>2</sup>	250 Watts Peak	
Waximum rower Dissipation @ 25 C	250 waits reak	
Maximum Voltage and Current		
BVces Collector to Emitter Voltage	60 Volts	
BVebo Emitter to Base Voltage	4.0 Volts	$ / \geq \leq $
Ic Collector Current	6.0 Amps Peak	$  \langle / \rangle \rangle$
Maximum Temperatures		
Storage Temperature	- 65 to +150 °C	
Operating Junction Temperature	$+ 200^{\circ}$ C	

## ELECTRICAL CHARACTERISTICS @ 25°C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS
P <sub>OUT</sub>	Power Out	F= 1025-1150 MHz	90	98		W
P <sub>IN</sub>	Power Input	Vcc = 50 Volts			14	W
P <sub>G</sub>	Power Gain	$PW = 10 \ \mu sec, DF = 1\%$	8.0	8.5		dB
ης	Efficiency		35	38		%
VSWR	Load Mismatch Tolerance	F = 1090 MHz			10:1	

## FUNCTIONAL CHARACTERISTICS @ 25°C

BVebo	Emitter to Base Breakdown	Ie = 1 mA	3.5		V
BVces	Collector to Emitter Breakdown	Ic = 10mA	65		V
Hfe	DC Current Gain	Vce = 5V, $Ic = 500  mA$	15	120	
Cob	Output Capacitance	Vcb = 50 V, f = 1 MHz		16	pF
θjc <sup>2</sup>	Thermal Resistance			0.6	°C/W

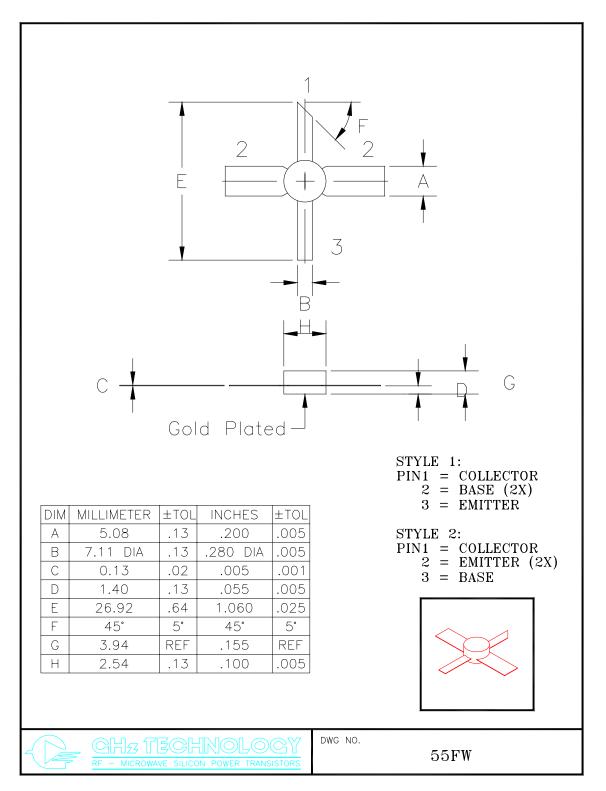
Note 1: At rated output power and pulse conditions

2: At rated pulse conditions

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