

1075MP

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

GENERAL DESCRIPTION The 1075MP is a COMMON BASE bipolar transistor. It is designed for pulsed systems in the frequency band 1025-1150 MHz. The device has gold thin-film metallization for proven highest MTTF. The transistor includes input prematch for broadband capability. Low thermal resistance package reduces junction temperature, extends life.		CASE OUTLINE 55FW-1
ABSOLUTE MAXIMUM RATINGS	250 M DI	
Maximum Power Dissipation @ 25°C ²	250 Watts Pk	
Maximum Voltage and Current		
BVces Collector to Emitter Voltage	65 Volts	
BVebo Emitter to Base Voltage	3.5 Volts	
Ic Collector Current	6.5 Amps Pk	$ \langle \rangle \rangle$
Maximum Temperatures	_	\sim
Storage Temperature	$-65 \text{ to} + 150^{\circ} \text{C}$	
Operating Junction Temperature	+ 200°C	

ELECTRICAL CHARACTERISTICS @ 25°C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS
P _{OUT}	Power Out	F= 1025-1150 MHz	75			W
P _{IN}	Power Input	Vcc = 50 Volts			13	W
P _G	Power Gain	PW = 10 μ sec, DF = 1%	7.6	8.5		dB
ης	Efficiency			40		%
VSWR ¹	Load Mismatch Tolerance	F = 1090 MHz			20:1	

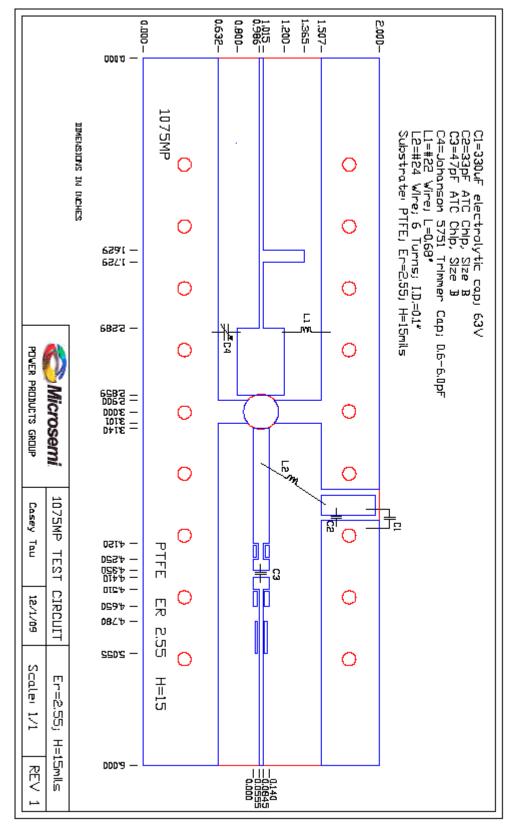
FUNCTIONAL CHARACTERISTICS @ 25°C

BVebo	Emitter to Base Breakdown	Ie = 5 mA	3.5			V
BVces	Collector to Emitter Breakdown	Ic = 15mA	65			V
Hfe	DC Current Gain	Vce = 5V, Ic = 100 mA	20			
Cob	Output Capacitance	Vcb = 50 V, f = 1 MHz		12		pF
θjc^1	Thermal Resistance				0.6	°C/W

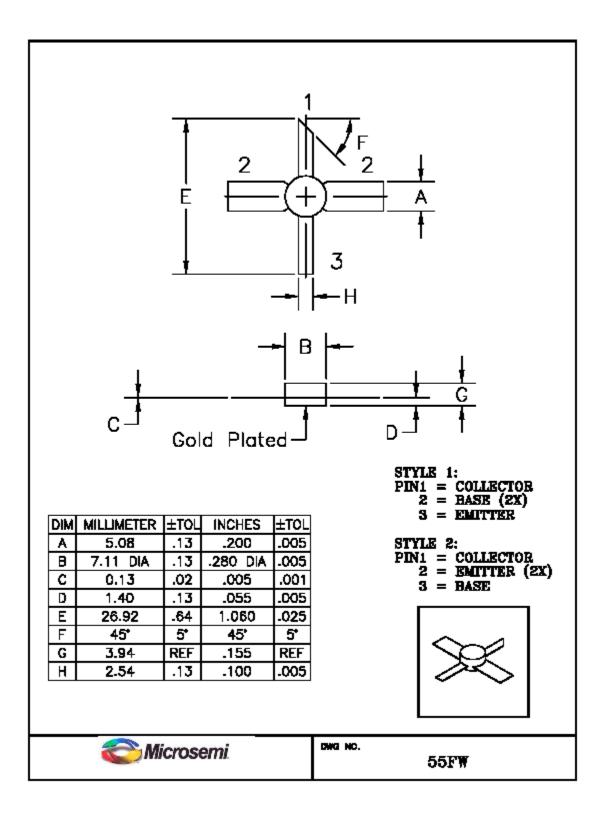
Note 1: At rated pulse conditions

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