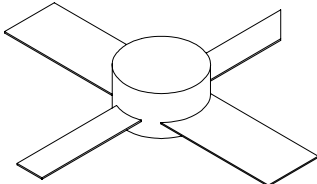




1075MP

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 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 Maximum Temperatures Storage Temperature - 65 to + 150°C Operating Junction Temperature + 200°C		

ELECTRICAL CHARACTERISTICS @ 25°C

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

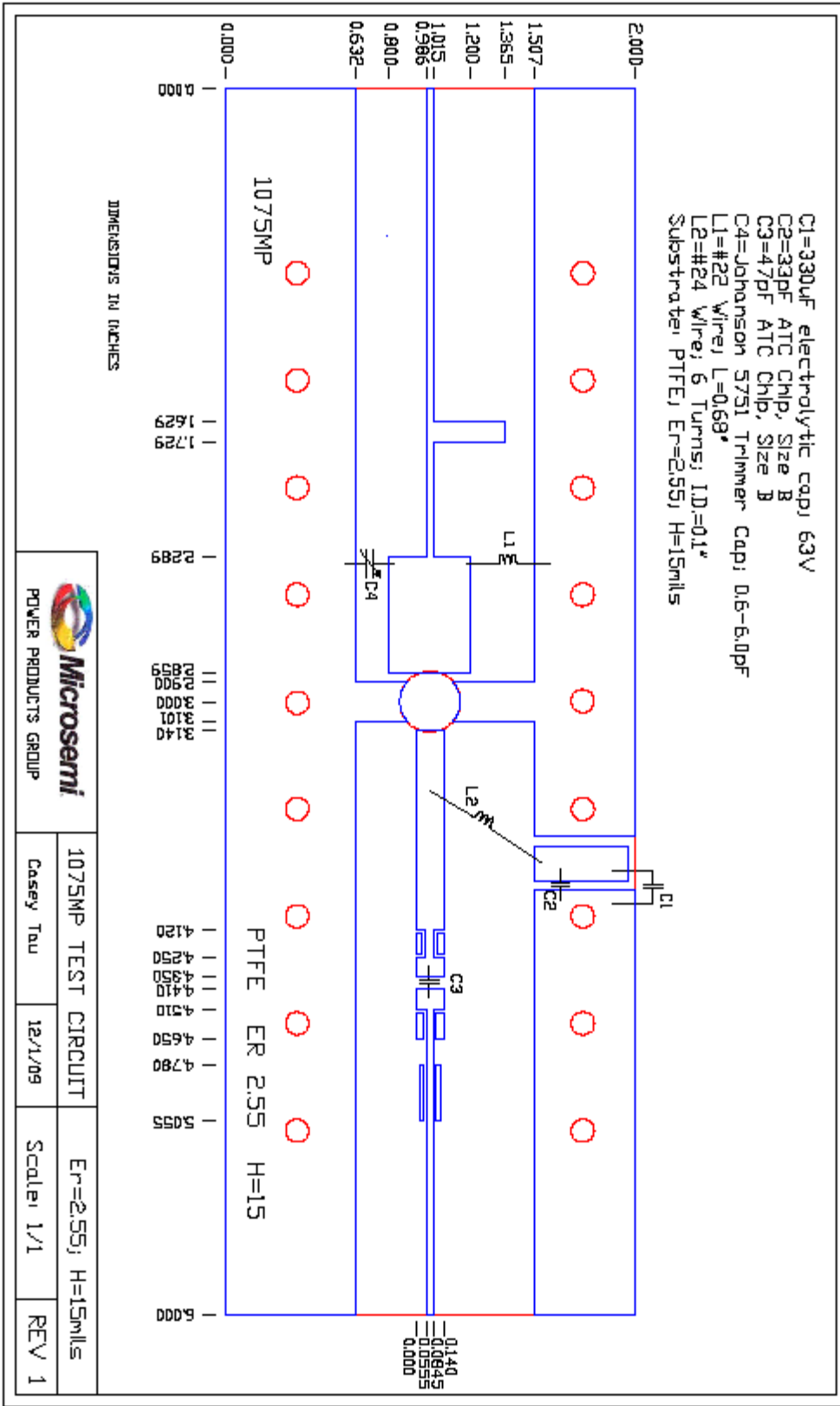
FUNCTIONAL CHARACTERISTICS @ 25°C

BVebo	Emitter to Base Breakdown	I _e = 5 mA	3.5			V
BVces	Collector to Emitter Breakdown	I _c = 15mA	65			V
Hfe	DC Current Gain	V _{ce} = 5V, I _c = 100 mA	20			
Cob	Output Capacitance	V _{cb} = 50 V, f = 1 MHz		12		pF
θ _{jc} ¹	Thermal Resistance				0.6	°C/W

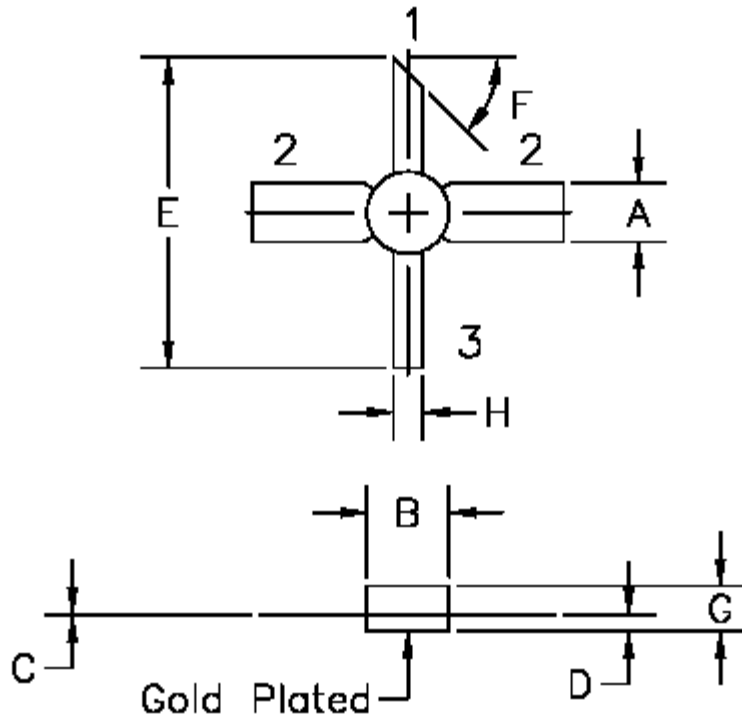
Note 1: At rated pulse conditions

Rev A: Dec 2009

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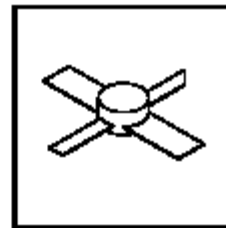
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STYLE 1:
PIN1 = COLLECTOR
2 = BASE (2X)
3 = EMITTER

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