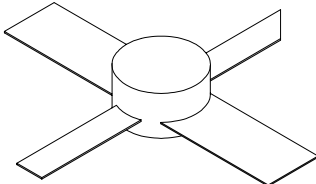




1035MP

35 Watts, 50 Volts

Avionics 1025 - 1150 MHz

GENERAL DESCRIPTION <p>The 1035 MP 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.</p>	CASE OUTLINE 55FW-1 
ABSOLUTE MAXIMUM RATINGS <p>Maximum Power Dissipation @ 25°C² 125 Watts Pk</p> <p>Maximum Voltage and Current</p> <p>BVces Collector to Emitter Voltage 65 Volts BVebo Emitter to Base Voltage 3.5 Volts Ic Collector Current 2.5 Amps Pk</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to + 150°C Operating Junction Temperature + 200°C</p>	

ELECTRICAL CHARACTERISTICS @ 25°C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
P _{OUT}	Power Out	F= 1025-1150 MHz	35			W
P _{IN}	Power Input	V _{cc} = 50 Volts			3.5	W
P _G	Power Gain	PW = 10 µsec, DF = 1%	10	10.5		dB
η _c	Efficiency			45		%
VSWR	Load Mismatch Tolerance	F = 1090 MHz			10:1	

FUNCTIONAL CHARACTERISTICS @ 25°C

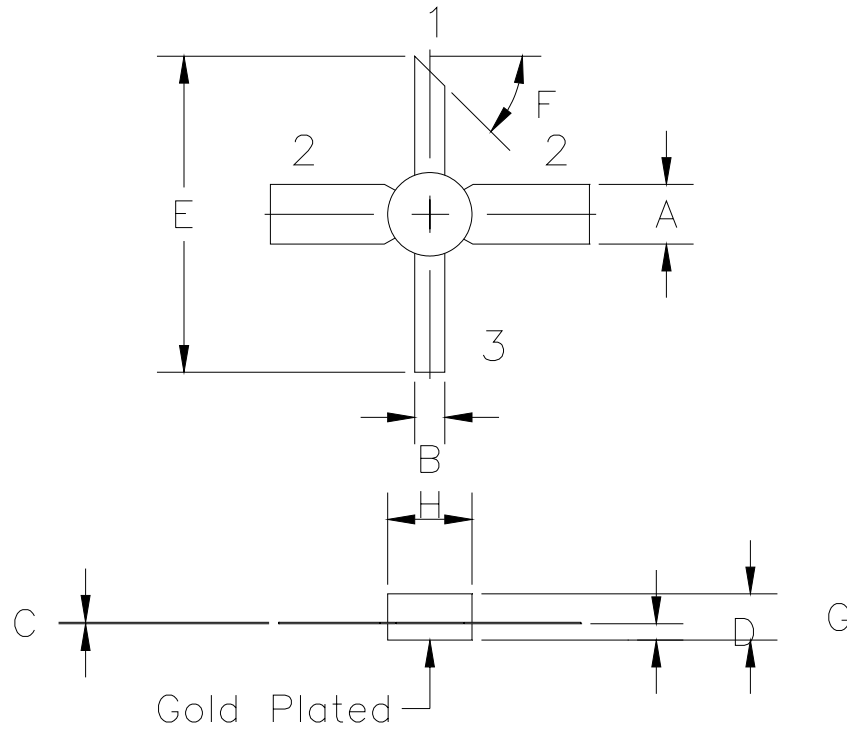
BVebo	Emitter to Base Breakdown	I _e = 5 mA	3.5			V
BVces	Collector to Emitter Breakdown	I _c = 15mA	65			V
H _{fe}	DC Current Gain	V _{ce} = 5V, I _c = 100 mA	20			
Cob	Output Capacitance	V _{cb} = 50 V, f = 1 MHz		17	20	pF
θ _{jc} ²	Thermal Resistance				1.4	°C/W

- Note 1: At rated output power and pulse conditions
 Note 2: At rated pulse conditions

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Advanced Power Technology reserves the right to change, without notice, the specifications and information contained herein. Visit our web site at www.advancedpower.com or contact our factory direct.

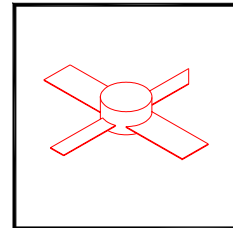
1035MP



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



GHz TECHNOLOGY
 RF - MICROWAVE SILICON POWER TRANSISTORS

DWG NO.

55FW