

# 1035 MP

35 Watt, 50 Volts, Class C  
Avionics 1025 - 1150 MHz

## GENERAL DESCRIPTION

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.

## ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C<sup>2</sup> 125 Watts Pk

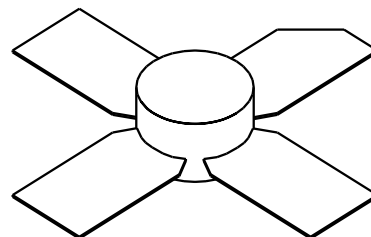
### Maximum Voltage and Current

BVces Collector to Emitter Voltage 65 Volts  
BVebo Emitter to Base Voltage 3.5 Volts  
Ic Collector Current 2.5 Amps Pk

### Maximum Temperatures

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

## CASE OUTLINE 55FU, STYLE 1



## ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F= 1025-1150 MHz	35			Watts
Pin	Power Input	Vcc = 50 Volts			3.5	Watts
Pg	Power Gain	PW = 10 μsec	10	10.5		dB
ηc	Efficiency	DF = 1%		45		%
VSWR	Load Mismatch Tolerance	F = 1090 MHz			10:1	

BVebo	Emitter to Base Breakdown	Ie = 5 mA	3.5			Volts
BVces	Collector to Emitter Breakdown	Ic = 15mA	65			Volts
Hfe	DC Current Gain to Emitter	Vce = 5V, Ic = 100 mA	20			
Cob	Output Capacitance	Vcb = 50 V, f = 1 MHz		17	20	pF
θjc <sup>2</sup>	Thermal Resistance	Pulsed			1.4	°C/W

Note 1: At rated output power and pulse conditions

2: At rated pulse conditions

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