

## 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

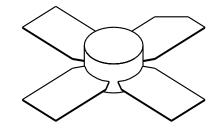
**Maximum Voltage and Current** 

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  $-65 \text{ to} + 150^{\circ}\text{C}$ Operating Junction Temperature  $+200^{\circ}\text{C}$ 

# CASE OUTLINE 55FU, STYLE 1



### **ELECTRICAL CHARACTERISTICS** @ 25 °C

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

BVebo BVces Hfe Cob	Emitter to Base Breakdown Collector to Emitter Breakdown DC Current Gain to Emitter Output Capacitance	Ie = 5 mA Ic = 15mA Vce = 5V, Ic = 100 mA Vcb = 50 V, f = 1 MHz	3.5 65 20	17	20	Volts Volts pF
$\theta$ jc <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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