

1015 MP

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

GENERAL DESCRIPTION

The 1015 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°C² 50 Watts Pk

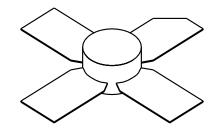
Maximum Voltage and Current

BVcesCollector to Emitter Voltage65 VoltsBVeboEmitter to Base Voltage3.5 VoltsIcCollector Current1.0 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	15 10	11 40	1.5 20:1	Watts Watts dB %

BVebo BVces Hfe	Emitter to Base Breakdown Collector to Emitter Breakdown DC Current Gain to Emitter	Ie = 5 mA Ic = 15mA	3.5 65 20			Volts Volts
Cob θjc²	Output Capacitance Thermal Resistance	Vce = 5V, Ic = 100 mA Vcb = 50 V, f = 1 MHz Pulsed	20	5.0	7.5 3.5	pF °C/W

Note 1: At rated output power and pulse conditions

2: At rated pulse conditions

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