

## 1015MP

## 15 Watts, 50 Volts Avionics 1025 - 1150 MHz

#### **GENERAL DESCRIPTION**

The 1015 MP is a COMMON BASE bipolar transistor. It is designed for pulsed systems up to 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

#### ABSOLUTE MAXIMUM RATINGS

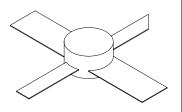
Maximum Power Dissipation @ 25°C<sup>2</sup> 50 Watts Pk

**Maximum Voltage and Current** 

BVces Collector to Emitter Voltage 65 Volts
BVebo Emitter to Base Voltage 3.5 Volts
Ic Collector Current 1.0 Amps Pk

**Maximum Temperatures** 

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



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

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$P_{OUT}$	Power Out	F= 1150 MHz	15			W
P <sub>IN</sub>	Power Input	Vcc = 50 Volts			1.5	W
$P_{G}$	Power Gain	$PW = 10 \mu sec, DF = 1\%$	10	11		dB
ης	Efficiency			40		%
VSWR	Load Mismatch Tolerance	F = 1150 MHz			10:1	

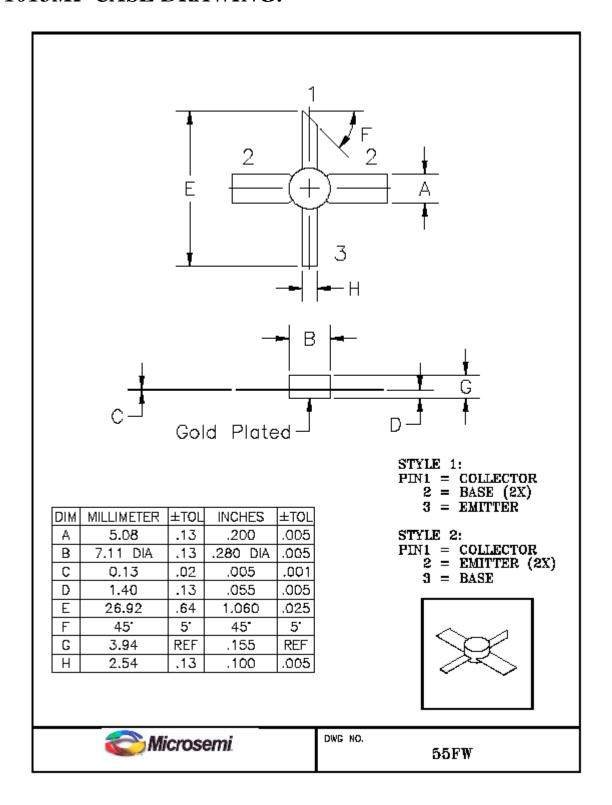
#### FUNCTIONAL CHARACTERISTICS @ 25°C

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

Note 1: At rated output power and pulse conditions

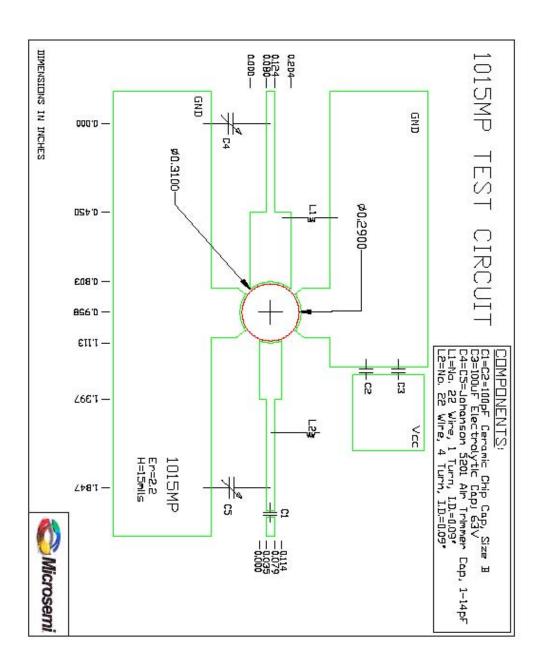
Rev A: Updated June 2009

### 1015MP CASE DRAWING:



Microsemi reserves the right to change, without notice, the specifications and information contained herein. Visit our web site at <a href="https://www.advancedpower.com">www.advancedpower.com</a> or contact our factory direct.

## 1015MP TEST CIRCUIT:



## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for RF Bipolar Transistors category:

Click to view products by Microsemi manufacturer:

Other Similar products are found below:

MAPRST0912-50 MCH4016-TL-H MMBT5551-G PH3135-90S MRF10120 MRF587 15GN01CA-TB-E BFR 360L3 E6765 PH1214100EL PH1214-25M 2SA1257-5-TB-E MAPRST0912-350 MCH4014-TL-H MMBTH10-TP BFP 420F H6327 BFP 620F H7764 BFP 640F
H6327 BFP 720F H6327 BFP 740F H6327 BFR 340L3 E6327 BFR 360F H6765 BFR 740L3RH E6327 PH2729-25M MRF10031
NSVF4009SG4T1G DSC5G02D0L BFP 182R E7764 BFP405H6740XTSA1 MRF10350 MRF321 PH2729-65M MRF317 ASMA201
MCH4015-TL-H BF888H6327XTSA1 MMBT2222A-G BFP196WH6327XTSA1 BFP405FH6327XTSA1 BFP640ESDH6327XTSA1
BFR193L3E6327XTMA1 BFR505T,115 BFU550WX BFU550XRR BFU580QX 55GN01FA-TL-H NSVF4020SG4T1G
NSVF6003SB6T1G MMBT5179 MS1406 STBV32-AP