

TPR 1000

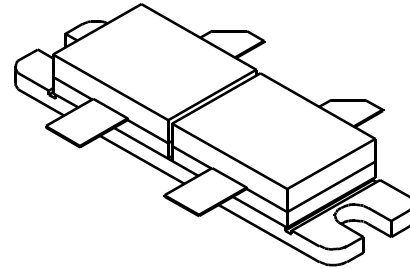
1000 Watts, 45 Volts, Pulsed
Avionics 1090 MHz

GENERAL DESCRIPTION

The TPR 1000 is a high power COMMON BASE bipolar transistor. It is designed for pulsed systems in the frequency band 1090 MHz. The device has gold thin-film metallization for proven highest MTF. The transistor includes input returns for **fast rise time**. Low thermal resistance package reduces junction temperature, extends life.

CASE OUTLINE

**55KV, Style 1
Common Base**



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C ²	2900 Watts
Maximum Voltage and Current	
BVces Collector to Base Voltage	65 Volts
BVebo Emitter to Base Voltage	3.5 Volts
Ic Collector Current	80 Amps
Maximum Temperatures	
Storage Temperature	- 65 to + 200°C
Operating Junction Temperature	+ 200°C

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 1090 MHz	1000			Watts
Pin	Power Input	Vcc = 45 Volts			250	Watts
Pg	Power Gain	PW = 10 μsec	6.0			dB
η_c	Collector Efficiency	DF = 1%		43		%
t_r	Rise Time				70	ns
VSWR¹	Load Mismatch Tolerance	F = 1030 MHz			9:1	

Bvebo^{3,4}	Emitter to Base Breakdown	Ie = 50mA	3.5			Volts
BVces⁴	Collector to Emitter Breakdown	Ic = 100mA	65			Volts
h_{FE}⁴	DC - Current Gain	Ic = 1000mA, Vce = 5 V	10			
θjc²	Thermal Resistance				0.06	°C/W

- Note 1: At rated output power and pulse conditions
- 2: At rated pulse conditions
- 3: Cannot measure due to input return
- 4: Per Side

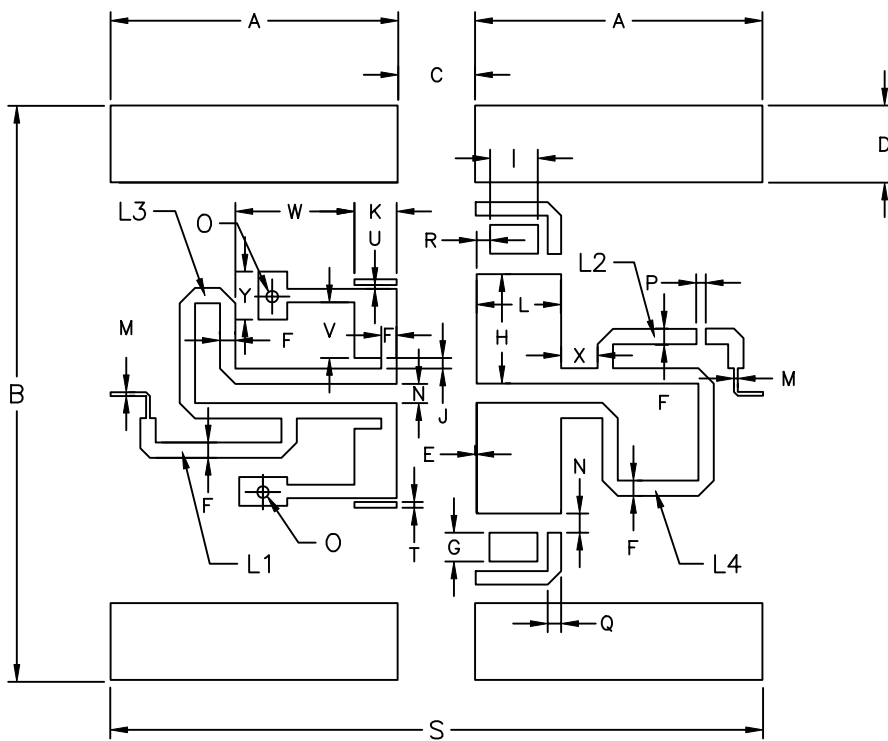
Issue A June 1997

GHz TECHNOLOGY INC. RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE. GHz RECOMMENDS THAT BEFORE THE PRODUCT(S) DESCRIBED HEREIN ARE WRITTEN INTO SPECIFICATIONS, OR USED IN CRITICAL APPLICATIONS, THAT THE PERFORMANCE CHARACTERISTICS BE VERIFIED BY CONTACTING THE FACTORY.

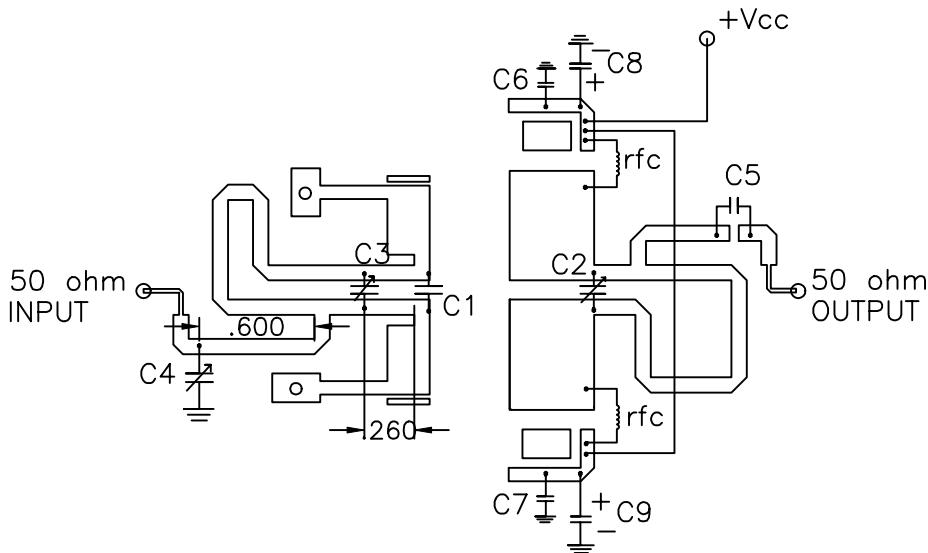
GHz Technology Inc. 3000 Oakmead Village Drive, Santa Clara, CA 95051-0808 Tel. 408 / 986-8031 Fax 408 / 986-8120

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
------	-----	-------------	------	----------



DIM	INCHES
A	1.500
B	3.000
C	.406
D	.4045
E	.004
F	.080
G	.150
H	.569
I	.254
J	.054
K	.220
L	.440
M	.019
N	.100
O	∅0.060
P	.050
Q	.074
R	.079
S	3.406
T	.030
U	.020
V	.290
W	0.615
X	0.175
Y	0.250
L1, L2	1.05
L3, L4	2.10



- C1=4.7pf ATC B
- C2=1-10pf Voltronics EJ10HV.
- C3,C4=.5-3.5pf Johnson
- C5=47pf ATC B
- C6,C7=82pf ATC B
- C8,C9=250MFD 60v

Board Type :
Ceramic
Er=10.2
Thk=.025inches.



CAGE
0PJR2

DWG NO.

TPR1000

REV -

SCALE

1/1

SHEET

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](#) [PH1214-100EL](#) [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](#) [BFR505T,115](#) [BFU550WX](#) [BFU550XRR](#) [BFU580QX](#) [55GN01FA-TL-H](#) [NSVF4020SG4T1G](#) [NSVF6003SB6T1G](#) [MMBT5179](#) [MS1406](#) [STBV32-AP](#) [BFG520,215](#)