

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









## **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 MTTF. The transistor includes input returns for **fast rise time**. Low thermal resistance package reduces junction temperature, extends life.

#### ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C<sup>2</sup> 2900 Watts

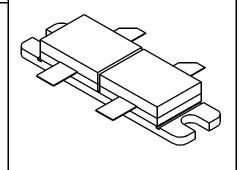
**Maximum Voltage and Current** 

BVcesCollector to Base Voltage65 VoltsBVeboEmitter to Base Voltage3.5 VoltsIcCollector Current80 Amps

**Maximum Temperatures** 

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

### CASE OUTLINE 55KV, Style 1 Common Base



### ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$\begin{aligned} & \textbf{Pout} \\ & \textbf{Pin} \\ & \textbf{Pg} \\ & \eta_c \\ & t_r \\ & \textbf{VSWR}^1 \end{aligned}$	Power Out Power Input Power Gain Collector Efficiency Rise Time Load Mismatch Tolerance	F = 1090 MHz Vcc = 45 Volts PW = 10 μsec DF = 1% F = 1030 MHz	1000	43	250 70 9:1	Watts Watts dB % ns

Bvebo <sup>3,4</sup> BVces <sup>4</sup> h <sub>FE</sub>	Emitter to Base Breakdown Collector to Emitter Breakdown DC - Current Gain	Ie = 50mA Ic = 100mA Ic = 1000mA, Vce = 5 V	3.5 65		Volts Volts
$\theta$ <b>j</b> $\mathbf{c}^2$	Thermal Resistance	ie – 1000mi, vee – 5 v	10	0.06	°C/W

Note 1: At rated output power and pulse conditions

2: At rated pulse conditions

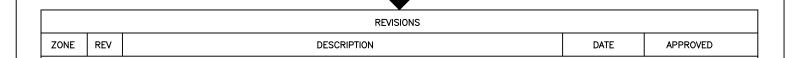
3: Cannot measure due to input return

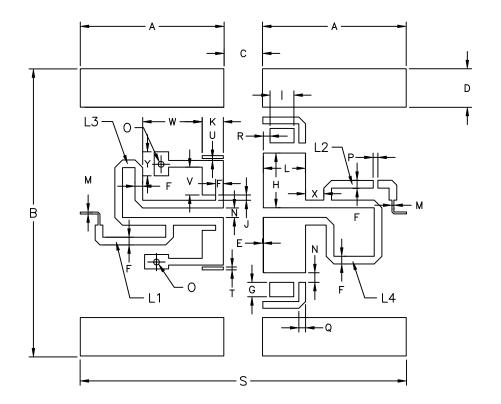
4: Per Side

Issue A June 1997

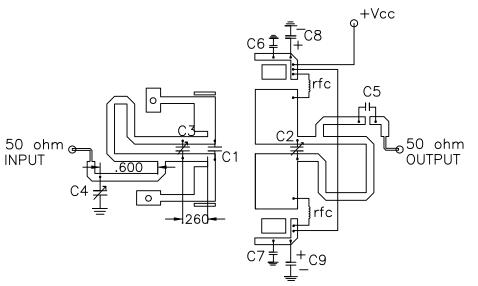
GHz TECHNOLOGY INC. RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE. GHZ RECOMMENDS THAT BEFORE THE PRODUCT(S) DESCRIBED HEREIN ARE WRITTEN INTO SPECIFICATIONS, OR USED IN CRITICAL APPLICATIONS, THAT THE PERFORMANCE CHARACTERISTICS BE VERIFIED BY CONTACTING THE FACTORY.

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





DIM	INCHES	
Α	1.500	
В	3.000	
O	.406	
D	.4045	
E	.004	
F	.080	
G	.150	
Ι	.569	
_	.254	
J	.054	
K	.220	
L	.440	
М	.019	
Z	.100	
0	ø0.060	
Р	.050	
q	.074	
R	.079	
S	3.406	
Т	.030	
J	.020	
V	.290	
W	0.615	
Х	0.175	
Υ	0.250	
L1, L2	1.05	
L3, L4	2.10	



C1=4.7pf ATC B C2=1-10pf Voltronics EJ10HV.

C3,C4=.5-3.5pfJohnson

C5=47pf ATC B C6,C7=82pf ATC B

C6,C7=82pt ATC B C8,C9=250MFD 60v

Board Type : Ceramic Er=10.2

Thk=.025inches.



cage OPJR2	DWG NO.	TPR1000		REV _
	SCALE	1/1	SHEET	