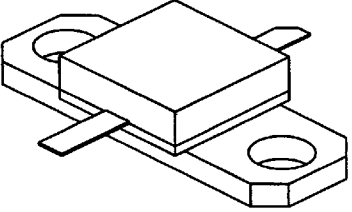


1417 - 2

2 Watt - 28 Volts, Class C
Microwave 1400 - 1700 MHz

GENERAL DESCRIPTION The 1417-2 is a COMMON BASE transistor capable of providing 2 Watts of Class C, RF output power over the band 1400-1700 MHz. This transistor is designed for Microwave Broadband Class C amplifier applications. It includes input prematching and utilizes gold metalization and diffused ballasting to provide high reliability and supreme ruggedness.	CASE OUTLINE 55LT, STYLE 1 
ABSOLUTE MAXIMUM RATINGS Maximum Power Dissipation @ 25°C 11 Watts Maximum Voltage and Current BVces Collector to Emitter Voltage 50 Volts BVebo Emitter to Base Voltage 3.5 Volts Ic Collector Current 0.5 A Maximum Temperatures Storage Temperature - 65 to + 150°C Operating Junction Temperature + 200°C	

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Out	F = 1.4-1.7 GHz	2.0			Watt
Pin	Power Input	Vcb = 28 Volts			0.3	Watt
Pg	Power Gain	Pin = 0.3 Watts	8.2	8.7		dB
η_c	Collector Efficiency	As Above		40		%
VSWR ₁	Load Mismatch Tolerance	F = 1.7 GHz, Pin = 0.3 W			30:1	

BVces	Collector to Emitter Breakdown	Ic = 10 mA	50			Volts
BVebo	Emitter to Base Breakdown	Ie = 1.0 mA	3.5			Volts
Icbo	Collector to Base Current	Vcb = 28 Volts			0.5	mA
h _{FE}	Current Gain	Vce = 5 V, Ic = 100 mA	10		120	
Cob	Output Capacitance	F = 1.0 MHz, Vcb = 28 V		4.5		pF
θ_{jc}	Thermal Resistance				16	°C/W

Issue December 1995

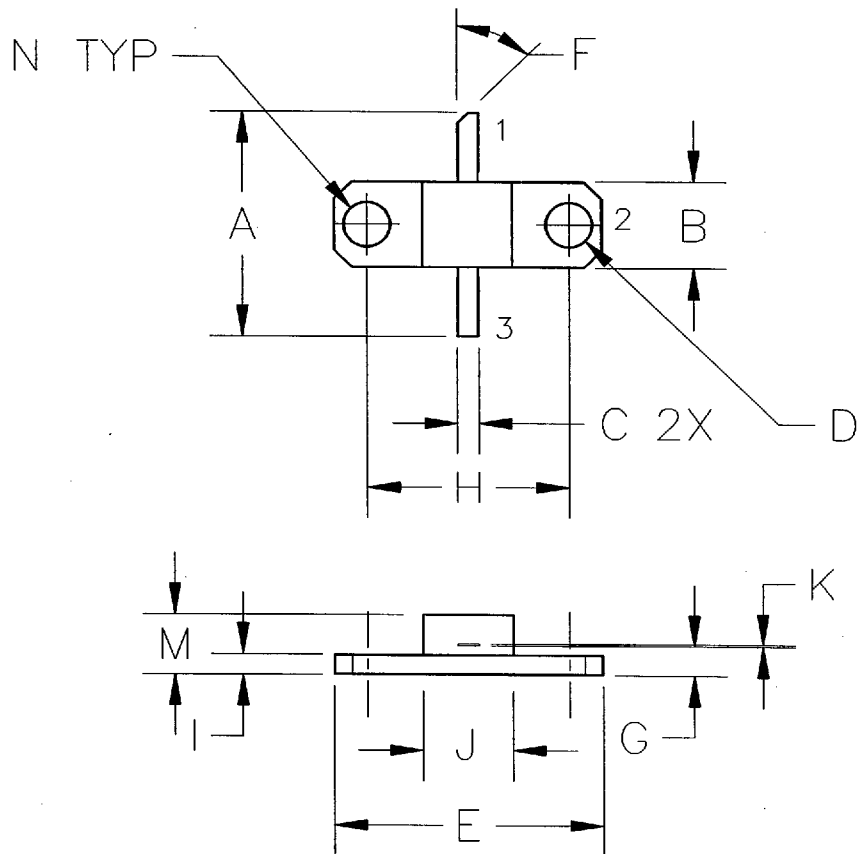
GHZ TECHNOLOGY INC. RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE. GHZ RECOMMENDS THAT BEFORE THE PRODUCT(S) DESCRIBED HEREIN ARE WRITTEN INTO SPECIFICATIONS, OR USED IN CRITICAL APPLICATIONS, THAT THE PERFORMANCE CHARACTERISTICS BE VERIFIED BY CONTACTING THE FACTORY.

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

9011110 0000034 25T

REVISIONS

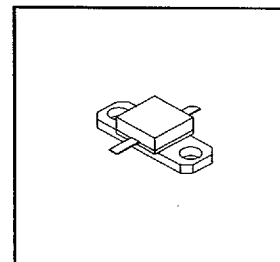
ZONE	REV	DESCRIPTION	DATE	APPROVED
------	-----	-------------	------	----------



DIM	MILLIMETER	TOL	INCHES	TOL
A	16.51	.25	.650	.010
B	6.35	.13	.250	.005
C	1.52	.13	.060	.005
D	3.17 DIA	.13	.130 DIA	.005
E	18.92	.05	.745	.002
F	45°	5°	45°	5°
G	2.16	.13	.085	.005
H	14.22	.05	.560	.002
I	1.52	.13	.060	.005
J	6.35	.13	.250	.005
K	0.13	.02	.005	.001
M	4.44	REF	.175	REF
N	1.27 x 45°	.13	.050 x 45°	.005

STYLE 1:
PIN1 = COLLECTOR
2 = BASE
3 = EMITTER

STYLE 2:
PIN1 = COLLECTOR
2 = EMITTER
3 = BASE



CAGE 0PJ2	DWG NO. 55LT	REV C
SCALE 2/1	SHEET	

9011110 0000035 196