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.

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

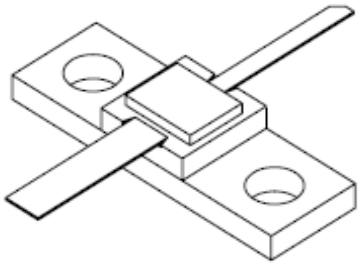
1014-6A

6 Watts - 28 Volts, Class C
Microwave 1000 - 1400 MHz

GENERAL DESCRIPTION

The 1014-6A is an internally matched, COMMON BASE transistor capable of providing 6 Watts of CW or pulsed RF output power across the band 1000 to 1400 MHz. This hermetically solder-sealed transistor is specifically designed for microwave broadband applications. It utilizes gold metallization and diffused emitter ballasting to provide high reliability and supreme ruggedness.

CASE OUTLINE
55LV, STYLE 1



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C 19 Watts

Maximum Voltage and Current

BVces	Collector to Emitter Voltage	50 Volts
BVebo	Emitter to Base Voltage	3.5 Volts
Ic	Collector Current	1.0 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	Freq = 1400 MHz	6			Watts
Pg	Power Gain	Vcc = 28 Volts	7.0	7.5		dB
ηc	Collector Efficiency	Pin = 1.2 Watts		40		%
VSWR[1]	Load Mismatch Tolerance	Pulse Width = CW			10:1	

FUNCTIONAL CHARACTERISTICS @ 25°C

Bvces	Collector to Emitter Breakdown	Ic = 25 mA	50			Volts
BVebo	Emitter to Base Breakdown	Ie = 3 mA			3.5	Volts
θjc[1]	Thermal Resistance				9.0	°C/W

Microsemi Corp. 3000 Oakmead Village Drive, Santa Clara, CA 95051-0808 Tel. 408 / 986-8031 Fax 408 /869-2324

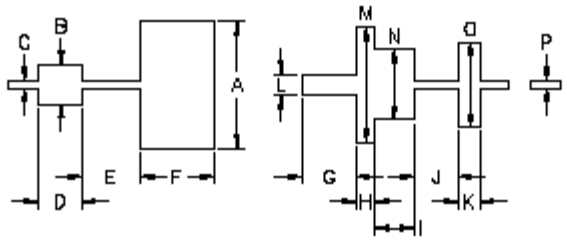
1014-6A

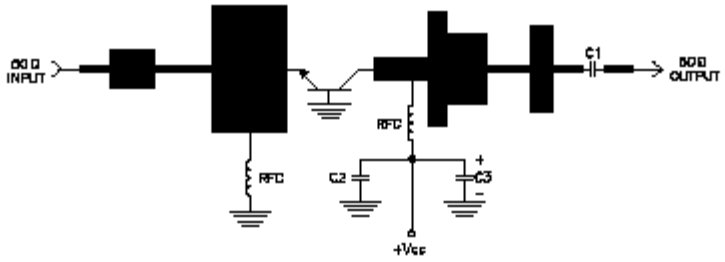
Test Circuit

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

DIM	INCHES
A	.870
B	.270
C	.053
D	.300
E	.400
F	.500
G	.370
H	.125
I	.270
J	.300
K	.150
L	.140
M	.785
N	.460
O	.560
P	.053





DIELECTRIC = 19.4 MIL THICK
TFE, Er=2.43
C1, C2 = 62pF CHIP ATC "A"
C3 = 10MFD @ 35V
RFC = 4 turns #22 wire 1/16" I.D.

Microsemi	CAGE 0PJR2	DWG NO. 1014-6A	REV -
		SCALE 1/1	SHEET

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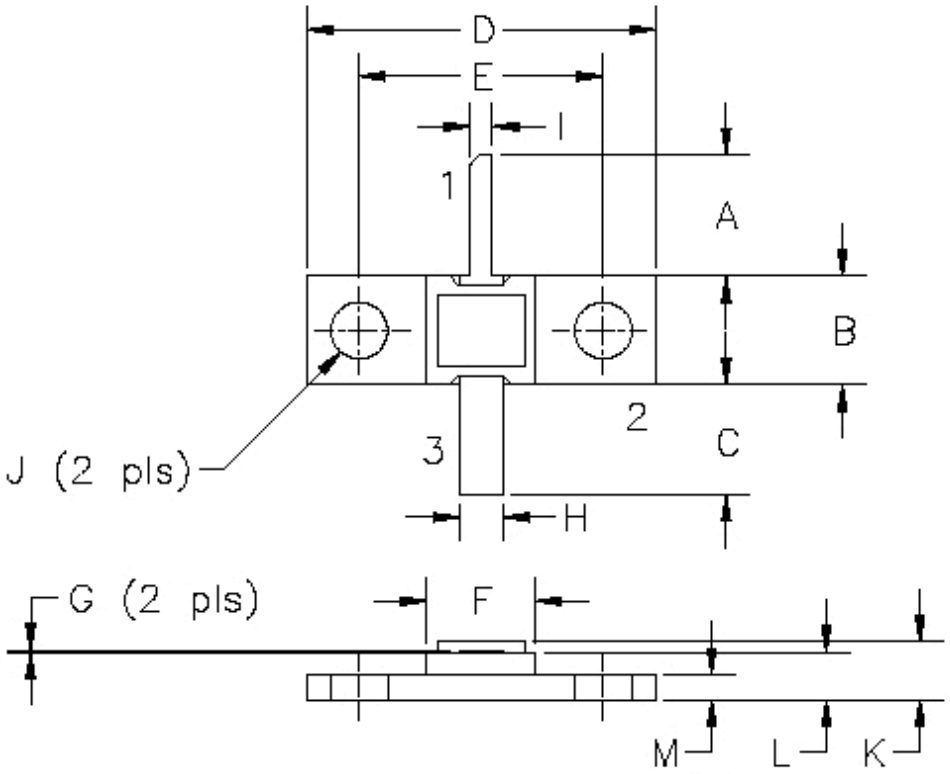
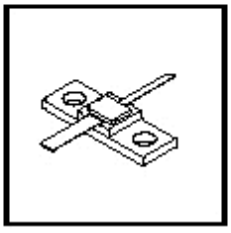
1014-6A



DIM	MILLIMETER	±TOL	INCHES	±TOL
A	9.53	.64	.375	.025
B	6.35	.13	.250	.005
C	9.53	.64	.375	.025
D	20.83	.25	.820	.010
E	14.48	.13	.570	.005
F	6.35	.13	.250	.005
G	0.10	.05	.004	.002
H	2.54	.13	.100	.005
I	1.27	.13	.050	.005
J	3.30 DIA	.13	.130 DIA	.005
K	3.43	.25	.135	.010
L	2.79	.20	.110	.008
M	1.52	.13	.060	.005

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

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



DWG NO. 55LV

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