



1014-6A

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

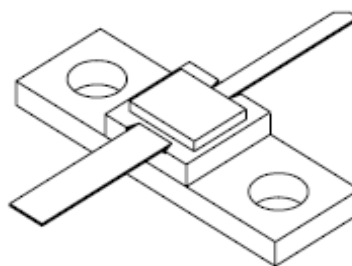
GENERAL DESCRIPTION

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.

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

CASE OUTLINE 55LV, STYLE 1



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	

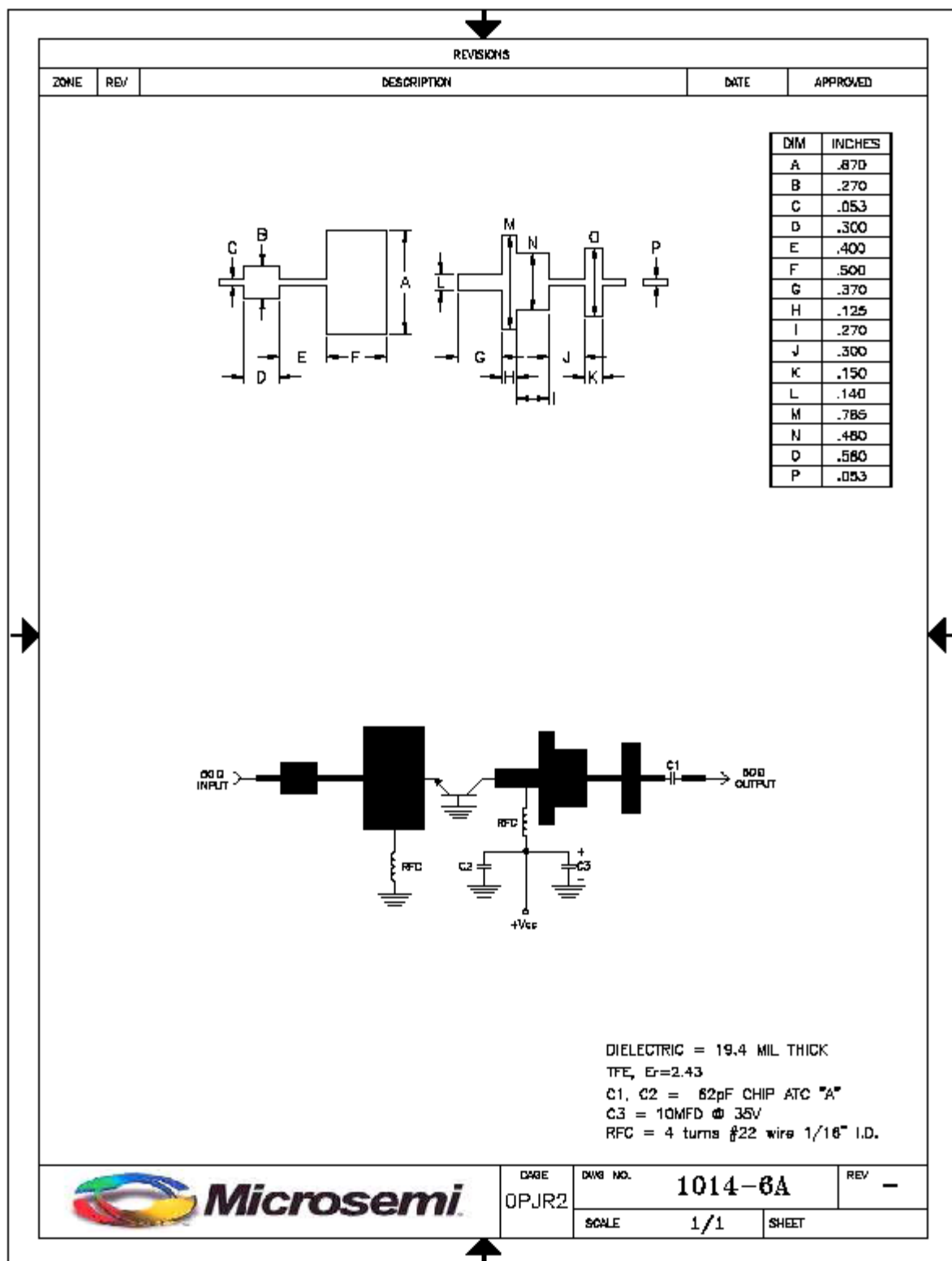
FUNCTIONAL CHARACTERISTICS @ 25°C

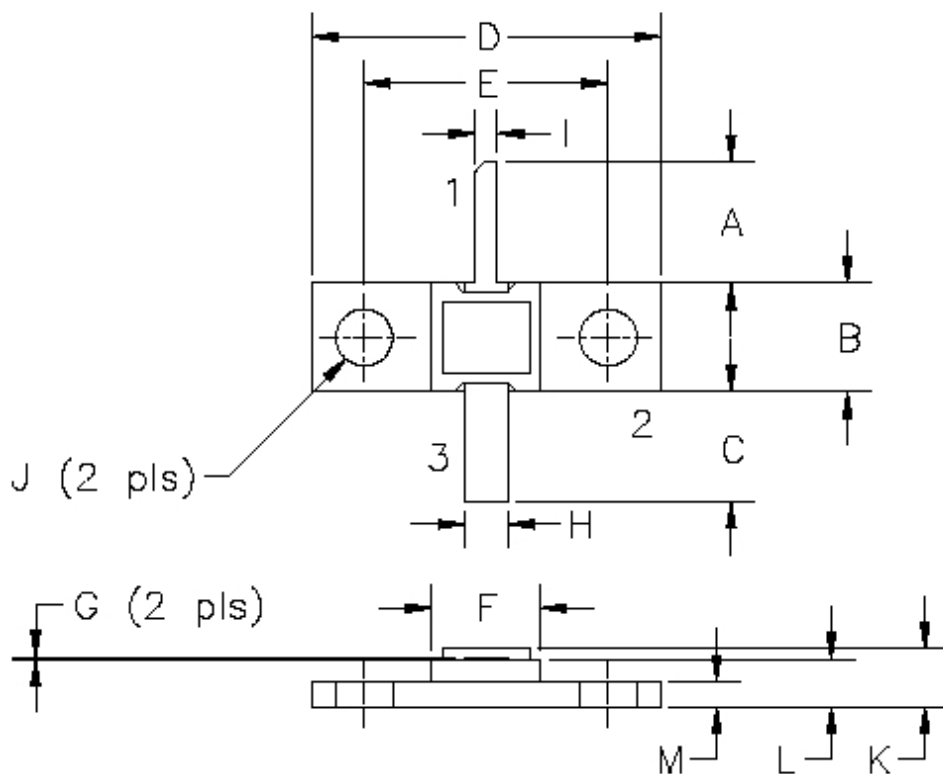
Bvces	Collector to Emitter Breakdown	Ic = 25 mA	50			Volts
BVebo	Emitter to Base Breakdown	Ie = 3 mA			3.5	Volts
θjc ¹	Thermal Resistance				9.0	°C/W



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Test Circuit





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

