



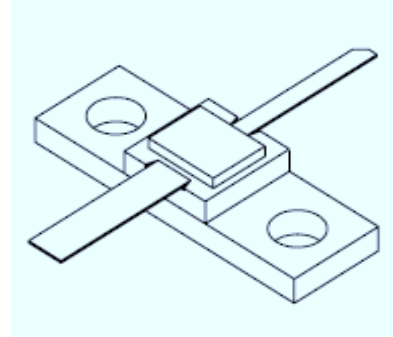
1014-6A

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



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	.480
O	.580
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.

	PAGE	PAGE NO.	1014-6A	REV	-
	OPJR2	SCALE	1/1	SHEET	

