



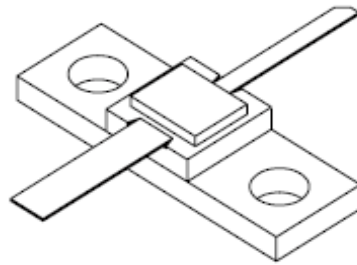
1014-6A

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		%
VSWR¹	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
θjc¹	Thermal Resistance				9.0	°C/W



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Test Circuit

