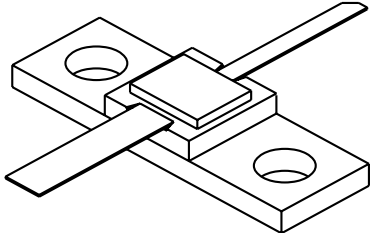


1415-2

2 Watts, 20 Volts, Class C
Microwave 1430 - 1540 MHz

<p>GENERAL DESCRIPTION</p> <p>The 1415-2 is an internally matched, COMMON BASE transistor capable of providing 2 watts of CW RF Output power across the 1430-1540 MHz band. This transistor is specifically designed for telemetry and telecommunications applications. It utilizes gold metalization and diffused ballasting to provide high reliability and superior ruggedness.</p>	<p>CASE OUTLINE 55LV, STYLE 1</p>
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 5.8 Watts</p> <p>Maximum Voltage and Current</p> <p>BVces Collector to Emitter Voltage 40 Volts BVebo Emitter to Base Voltage 3.5 Volts Ic Collector Current 0.30 Amps</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to + 200°C Operating Junction Temperature + 200°C</p>	

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Output	F = 1540 MHz	2.0			Watt
Pin	Power Input	Vcc = 20Volts			0.4	
Pg	Power Gain		7.0	7.5		dB
ηc	Collector Efficiency			45		%
VSWR	Load Mismatch Tolerance				∞:1	

BVebo	Emitter to Base Breakdown	Ie = 1 mA	3.5			Volts
BVces	Collector to Emitter Breakdown	Ic = 20mA	40			Volts
Icbo	Collector Leakage Current	Vcb = 20 V		1.0		mA
Cob	Output Capacitance	Vcb= 28V, F=1 MHz		3.5		pF
Hfe	DC - Current Gain	Ic = 200 mA, Vce = 5V	20		100	
θjc	Thermal Resistance	TC = 25°C			30	°C/W

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