

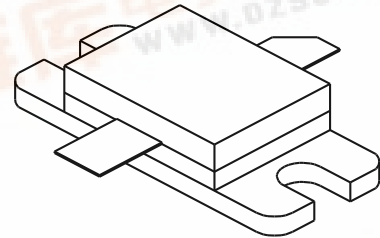
1718-32L

32 Watt - 24 Volts, Class C
Microwave 1750 - 1850 MHz

GENERAL DESCRIPTION

The 1718-32L is a COMMON BASE transistor capable of providing 32 Watts of Class C, RF output power over the band 1750-1850 MHz. This transistor is designed for Microwave Broadband Class C amplifier applications. It includes Input and Output prematching and utilizes Gold metalization and diffused ballasting to provide high reliability and supreme ruggedness. The transistor uses a fully hermetic High Temperature Solder sealed package.

CASE OUTLINE 55KT - STYLE 1



ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C	117 Watts
Maximum Voltage and Current	
BVces Collector to Emitter Voltage	50 Volts
BVebo Emitter to Base Voltage	3.5 Volts
Ic Collector Current	12 A
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	F = 1750-1850 MHz	32			Watt
Pin	Power Input	Vcb = 24 Volts			7	Watt
Pg	Power Gain	Pin = 7 Watts	6.5	7.0		dB
η_c	Collector Efficiency	As Above		40		%
VSWR ₁	Load Mismatch Tolerance	F = 1750 MHz, Pin = 7 W			3:1	

BVces	Collector to Emitter Breakdown	Ic = 20 mA	50			Volts
BVebo	Emitter to Base Breakdown	Ie = 15 mA	3.5			Volts
H _{FE}	Current Gain	Vce = 5 V, Ic = 500 mA	10		100	
Cob	Output Capacitance *	F = 1 MHz, Vcb = 28V				pF
θ_{jc}	Thermal Resistance				1.5	°C/W

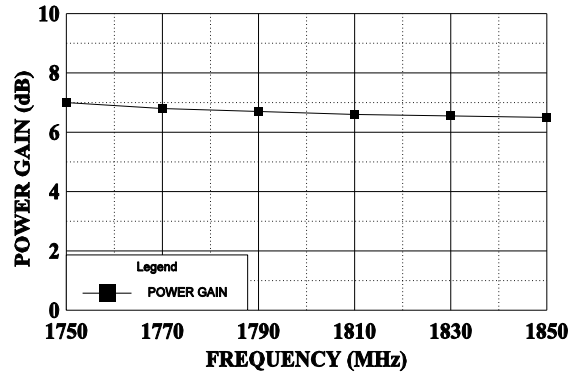
* Not measureable due to Output Prematch within the package

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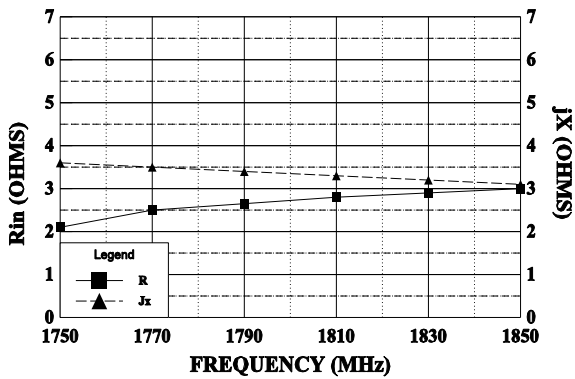
POWER GAIN vs FREQUENCY

Vcc 24 V, Pin = 7 Watts



SERIES INPUT IMPEDANCE vs FREQUENCY

Vcc = 24 V, Pin = 7 Watts



SERIES LOAD IMPEDANCE vs FREQUENCY

Vcc = 24 V, Pin = 7 Watts

