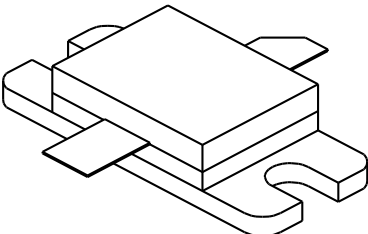


1718-32L

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

<p>GENERAL DESCRIPTION</p> <p>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.</p>	<p>CASE OUTLINE 55KT - STYLE 1</p>													
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 117 Watts</p> <p>Maximum Voltage and Current</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">BVces</td> <td style="width: 45%;">Collector to Emitter Voltage</td> <td style="width: 40%; text-align: right;">50 Volts</td> </tr> <tr> <td>BVebo</td> <td>Emitter to Base Voltage</td> <td style="text-align: right;">3.5 Volts</td> </tr> <tr> <td>Ic</td> <td>Collector Current</td> <td style="text-align: right;">12 A</td> </tr> </table> <p>Maximum Temperatures</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 45%;">Storage Temperature</td> <td style="width: 55%; text-align: right;">- 65 to + 200°C</td> </tr> <tr> <td>Operating Junction Temperature</td> <td style="text-align: right;">+ 200°C</td> </tr> </table>	BVces	Collector to Emitter Voltage	50 Volts	BVebo	Emitter to Base Voltage	3.5 Volts	Ic	Collector Current	12 A	Storage Temperature	- 65 to + 200°C	Operating Junction Temperature	+ 200°C	
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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		%
VSWR₁	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

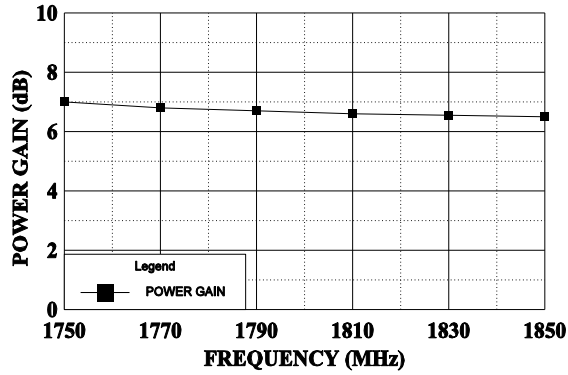
* Not measureable due to Output Prematch within the package

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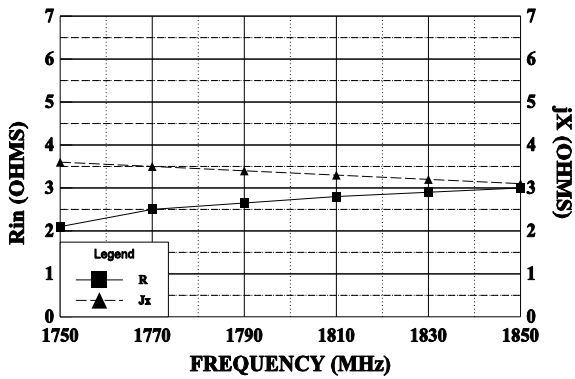
POWER GAIN vs FREQUENCY

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

