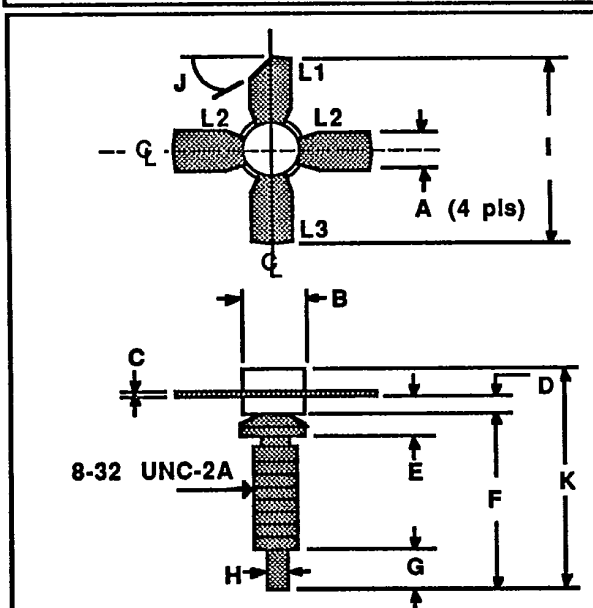


GENERAL DESCRIPTION

This device is specifically designed for UHF operation providing 50 watts of RF power output from a 28 volt supply and operating within the frequency range of 200-450 MHz.

C50-28
50 WATTS - 28 VOLTS
200 - 450 MHz

UHF COMMUNICATIONS



DIM	Millimeter	TOL	inches	TOL	
L1 : C	A	5.71	.13	.225	.005
L2 : E	B	9.52 DIA	.13	.375 DIA	.005
L3 : B	C	0.13	.02	.005	.001
	D	1.78	.13	.070	.005
	E	4.06	.13	.160	.005
	F	14.59	.25	.585	.010
	G	3.30	.13	.130	.005
	H	1.52	.13	.060	.005
	I	25.40	.25	1.000	.010
	J	45°	5°	45°	5°
	K	19.00	REF	.748	REF

ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C Case Temperature 110 W

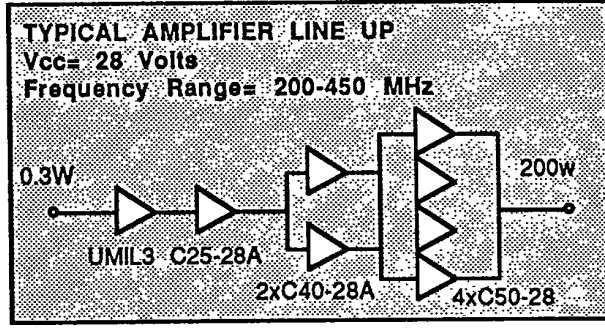
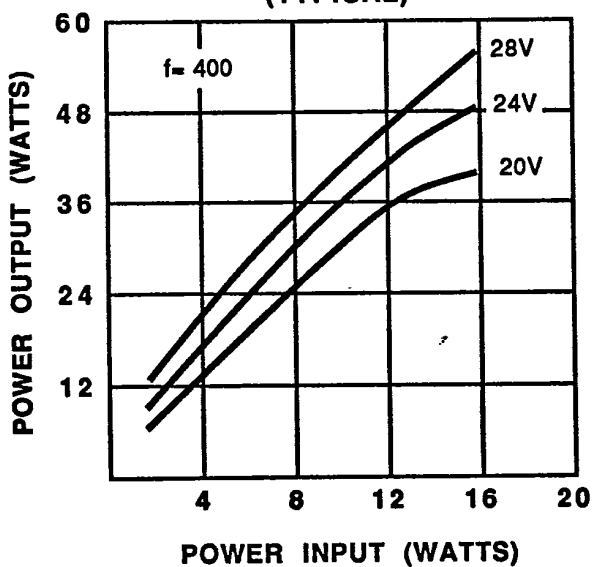
Maximum Voltage and Current

BVces Collector to Emitter Voltage 60 V
 BVebo Emitter to Base Voltage 4.0 V
 Ic Collector Current 6.0 A

Maximum Temperatures

Storage Temperature -65 to +150°C
 Operating Junction Temperature +200°C

POWER OUTPUT VS POWER INPUT (TYPICAL)



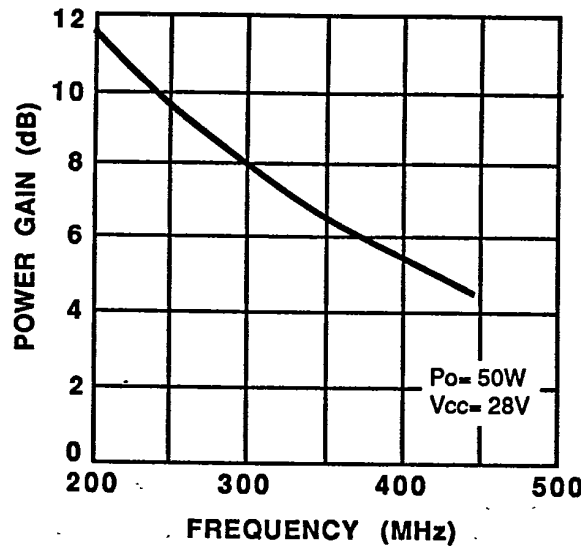
C50-28

ELECTRICAL CHARACTERISTICS¹

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
P _{out}	Power Output	f = 450 MHz V _{cc} = 28V	50			Watts
P _{in}	Power Input				15.5	Watts
P _g	Power Gain			6.5		dB
η _c	Collector Efficiency			60		%
VSWR	Load Mismatch Tolerance				30:1	
B _{Vebo}	Breakdown Voltage (Emitter to Base)	I _c = 0A, I _e = 5mA	4.0			Volts
B _{Vces}	Breakdown Voltage (Collector to Emitter)	V _{be} = 0A, I _c = 20mA	60			Volts
B _{Vceo}	Breakdown Voltage (Collector to Emitter)	I _b = 0A, I _c = 50mA	33			Volts
C _{ob}	Collector to Base				70	pF
h _{FE}	DC-Current Gain	V _{ce} = 5V, I _c = 1A	10			
θ _{jc}	Thermal Resistance				1.6	°C/W

Note 1: T_c = +25°C unless otherwise specified

POWER GAIN VS FREQUENCY (TYPICAL)

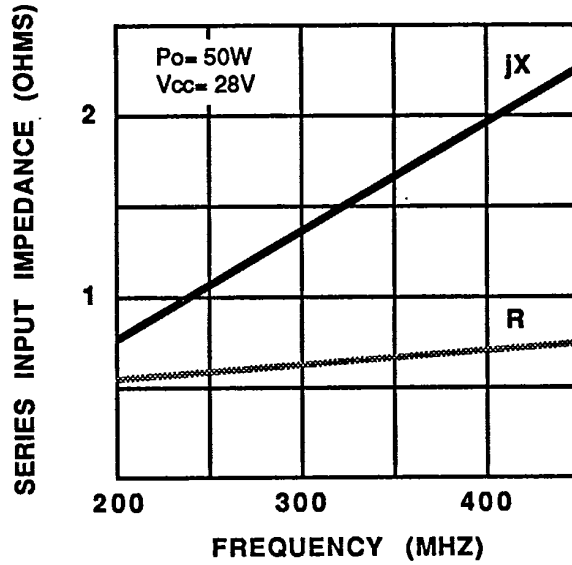


SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE

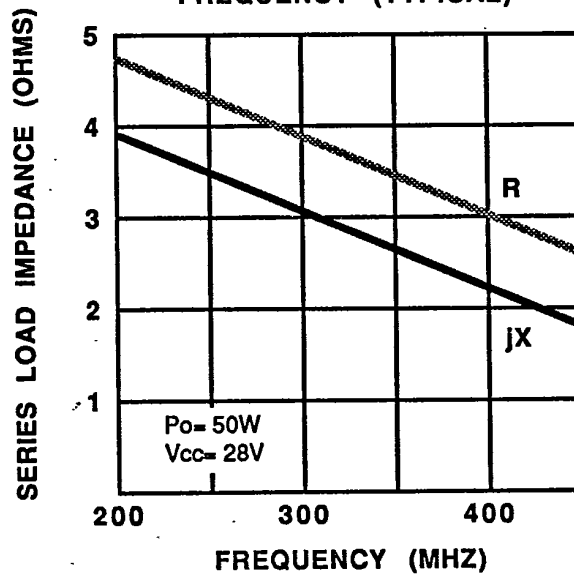
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**SERIES INPUT IMPEDANCE VS
FREQUENCY (TYPICAL)**



**SERIES LOAD IMPEDANCE VS
FREQUENCY (TYPICAL)**



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