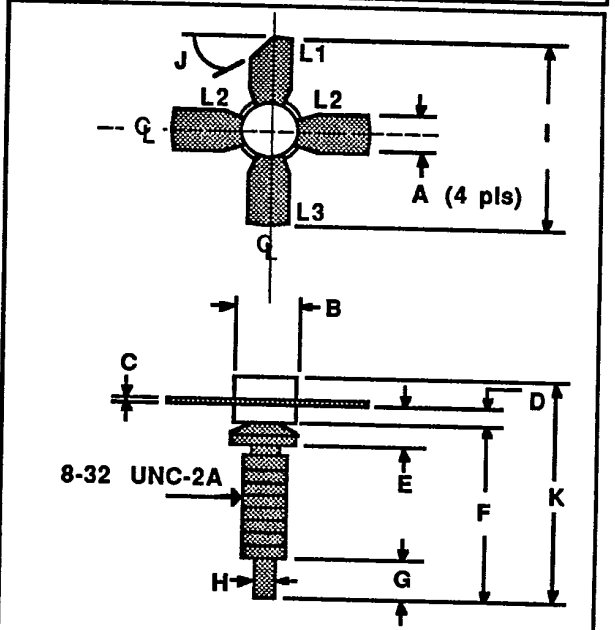


GENERAL DESCRIPTION

The B30-12 is designed for VHF land mobile applications delivering 30 watts of RF power output from a 12.5 volt supply and operates over the 150-175 MHz frequency band.

B30-12
30 WATTS - 12.5 VOLTS
150-175 MHz

LAND MOBILE

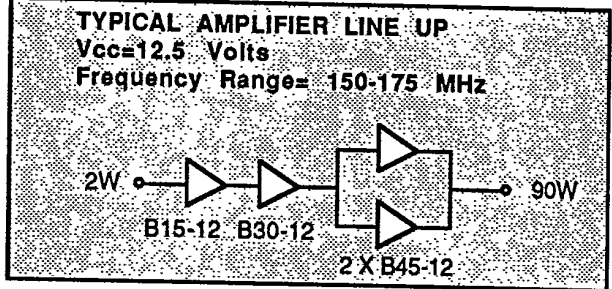
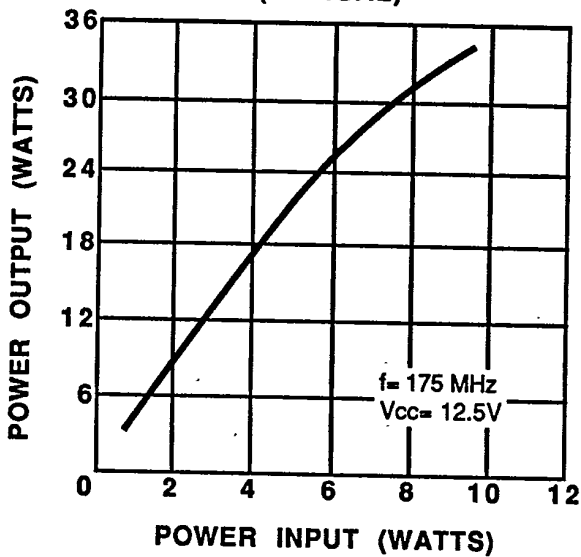


ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C Case Temperature	65 W
Maximum Voltage and Current	
BVces Collector to Emitter Voltage	36 V
BVebo Emitter to Base Voltage	4.0 V
Ic Collector Current	8.0 A
Maximum Temperatures	
Storage Temperature	-65 to +150°C
Operating Junction Temperature	+200°C

DIM	Millimeter	TOL	inches	TOL	
L1 : C					
L2 : E	A	5.71	.13	.225	.005
L3 : B	B	9.52 DIA	.13	.375 DIA	.005
	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

POWER OUTPUT VS POWER INPUT (TYPICAL)



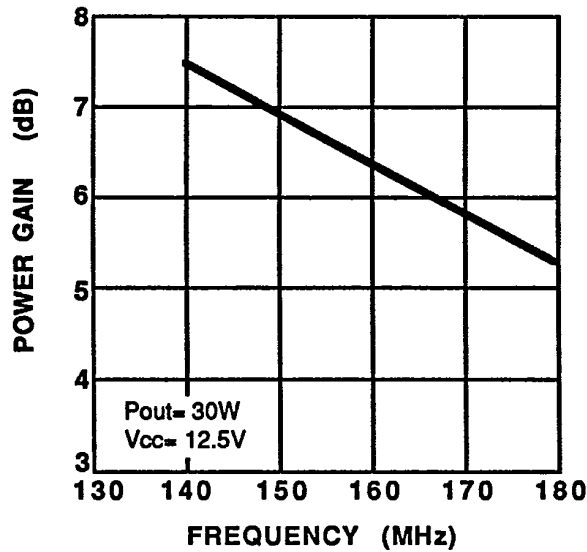
B30-12-2

ELECTRICAL CHARACTERISTICS¹

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
P _{out}	Power Output	f = 175 MHz V _{cc} = 12.5V	30			Watts
P _{in}	Power Input				8.5	Watts
P _g	Power Gain			6.0		dB
η _c	Collector Efficiency				60	%
V _{SWR}	Load Mismatch Tolerance				∞: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	36			Volts
B _{Vceo}	Breakdown Voltage (Collector to Emitter)	I _b = 0A, I _c = 50mA	18			Volts
C _{ob}	Capacitance-Collector to Base	V _{cb} = 12V, I _e = 0		110		pF
h _{fe}	DC-Current Gain	V _{CC} = 5.0V, I _C = 1.0A	20			
θ _{jc}	Thermal Resistance				2.9	°C/W

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

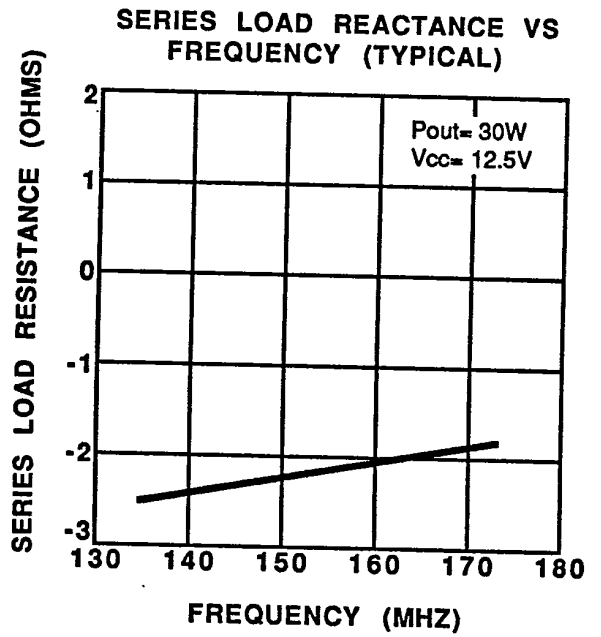
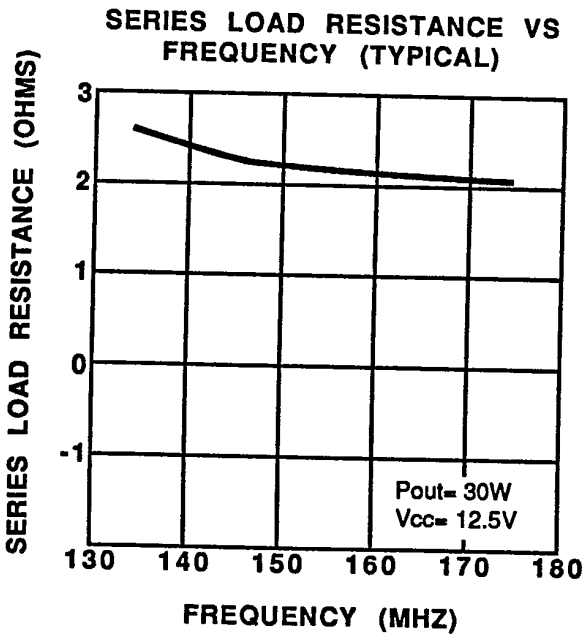
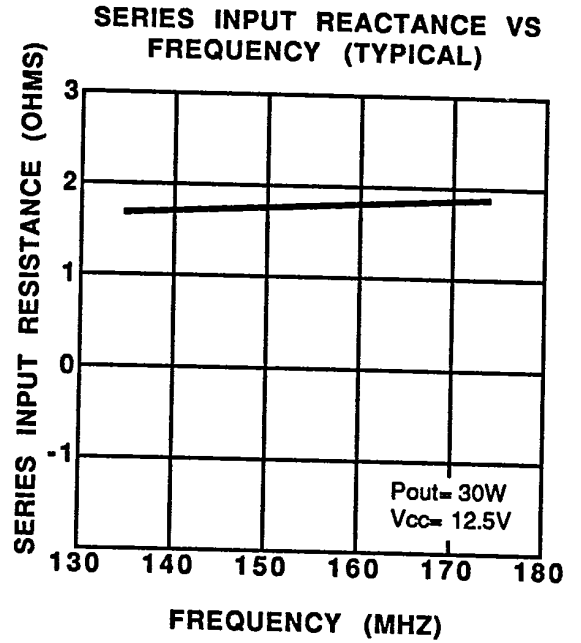
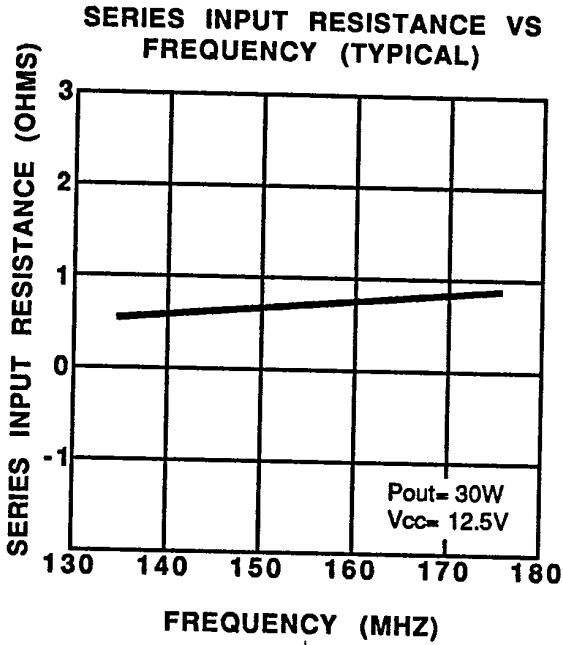
POWER GAIN VS FREQUENCY (TYPICAL)



SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE

2.15

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