

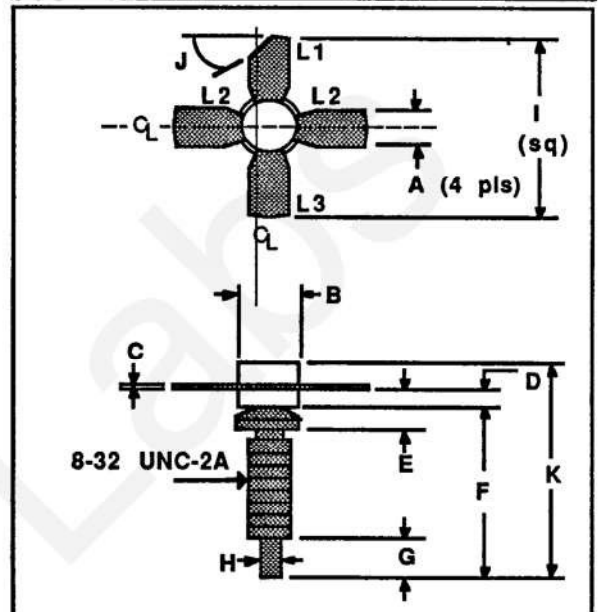
GENERAL DESCRIPTION

The B40-28 is specifically designed for VHF broadband linear power amplifier applications in the 100-200 MHz range. The device is capable of operation in Class A, AB or C amplifiers and provides the maximum power output/power gain combination.

B40-28 (2N6200)
40 WATTS - 28 VOLTS
100-200 MHz

VHF COMMUNICATIONS

Island Labs



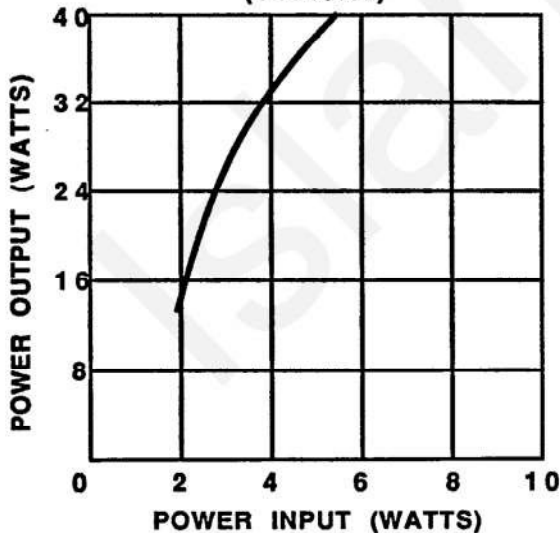
ABSOLUTE MAXIMUM RATINGS

Maximum Power Dissipation @ 25°C Case Temperature 85 W

Maximum Voltage and Current
 BVces Collector to Emitter Voltage 60 V
 BVebo Emitter to Base Voltage 4.0 V
 Ic Collector Current 8.5 A

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

POWER OUTPUT VS POWER INPUT (TYPICAL)



DIM	Millimeter	TOL	Inches	TOL
L1 : C				
L2 : E				
L3 : B				
A	5.71	.13	.225	.005
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

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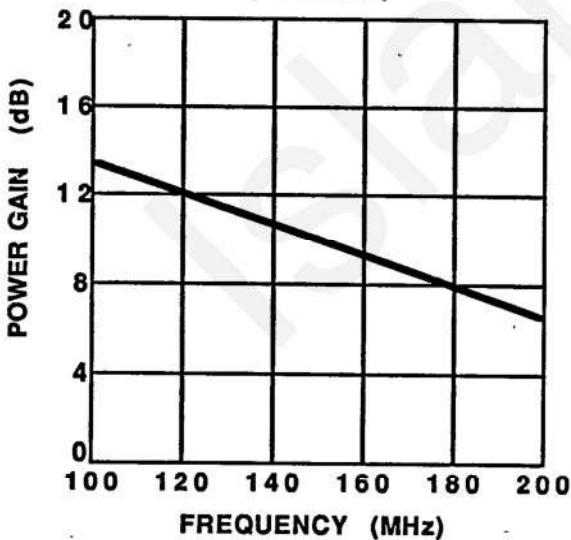
B40-28(2N6200)-2

ELECTRICAL CHARACTERISTICS¹

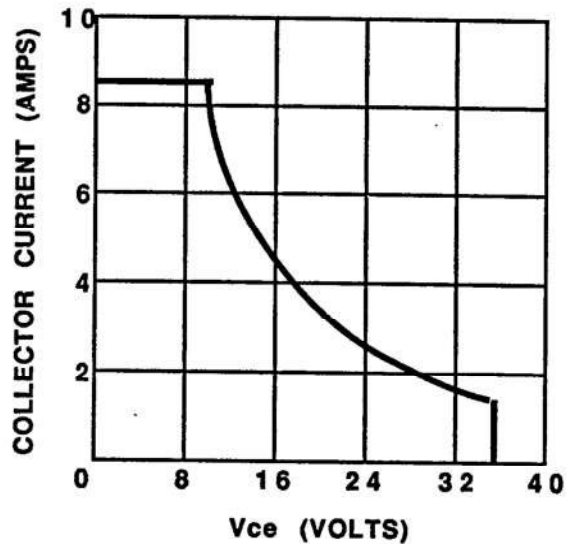
SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
P _{out}	Power Output	f = 175 MHz V _{cc} = 28V	40			Watts
P _{in}	Power Input				6.0	Watts
P _g	Power Gain			8.2		dB
η _c	Collector Efficiency				60	%
VSWR	Load Mismatch Tolerance			∞:1		
BV _{ebo}	Breakdown Voltage (Emitter to Base)	I _e = 5mA	4.0			Volts
BV _{ces}	Breakdown Voltage (Collector to Emitter)	I _c = 5mA	60			Volts
BV _{ceo}	Breakdown Voltage (Collector to Emitter)	I _c = 50mA	33			Volts
C _{ob}	Capacitance-Collector to Base	V _{cb} = 28V, f = 1 MHz			150	pF
h _{FE}	DC-Current Gain	V _{ce} = 5V, I _c = 1A	10			
θ _{jc}	Thermal Resistance			2.6		°C/W

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

POWER GAIN VS FREQUENCY (TYPICAL)



DC SAFE OPERATING AREA



SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT NOTICE

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