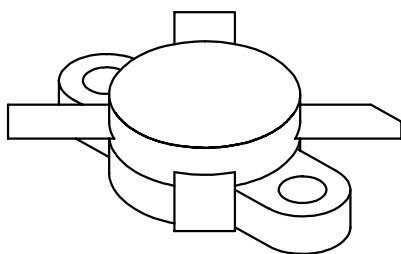


S200 – 50

200 Watts, 50 Volts, Class AB or C
Milcom 1.5 - 30 MHz

<p>GENERAL DESCRIPTION The S200-50 is a COMMON EMITTER, HF, SSB device intended for operation from a 50 Volts supply. It may be operated in Class A, AB or C. The device exhibits excellent linearity and ruggedness.</p>	<p>CASE OUTLINE 55HX, Style 2</p> 
<p>ABSOLUTE MAXIMUM RATINGS</p> <p>Maximum Power Dissipation @ 25°C 320 Watts</p> <p>Maximum Voltage and Current</p> <p>BVces Collector to Emitter Voltage 110 Volts BVebo Emitter to Base Voltage 4.0 Volts Ic Collector Current 30 A</p> <p>Maximum Temperatures</p> <p>Storage Temperature - 65 to +150°C Operating Junction Temperature +150°C</p>	

ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Pout	Power Output	F = 30 MHz	200			Watts
Pin	Power Input	Vcc = 50 Volts			12	Watts
Pg	Power Gain	Class C Bias	12	14.5		dB
ηc	Efficiency			60		%
VSWR	Load Mismatch Tolerance				30:1	

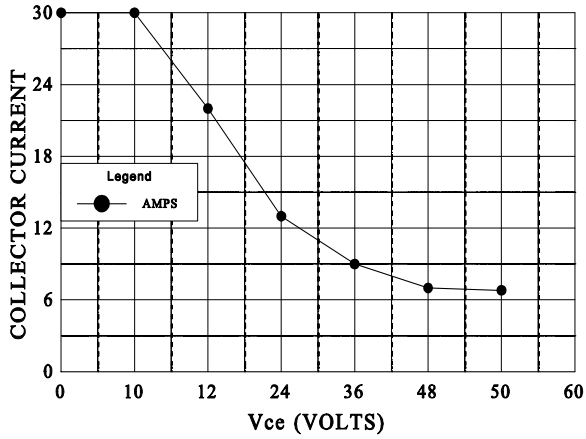
BVebo	Emitter to Base Breakdown	Ie = 20 mA	4.0			Volts
BVces	Collector to Emitter Breakdown	Ic = 100 mA	110			Volts
BVceo	Collector to Emitter Breakdown	Ie = 200 mA	70			Volts
Cob	Output Capacitance	Vcb = 50V, F = 1 MHz		300		pF
hFE	DC - Current Gain	Vce = 5 V, Ic = 1 A	10			
θjc	Thermal Resistance				.55	°C/W

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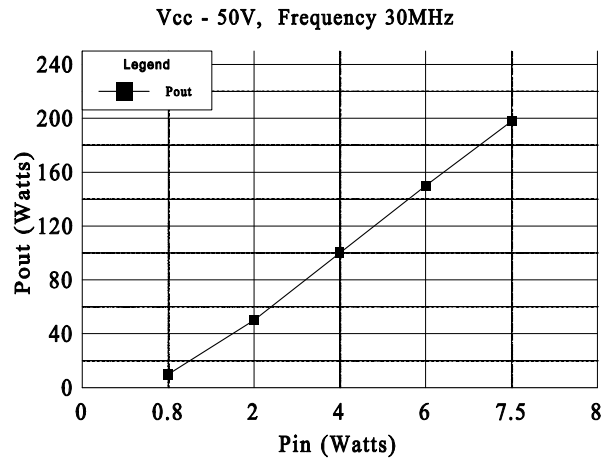


S200-50

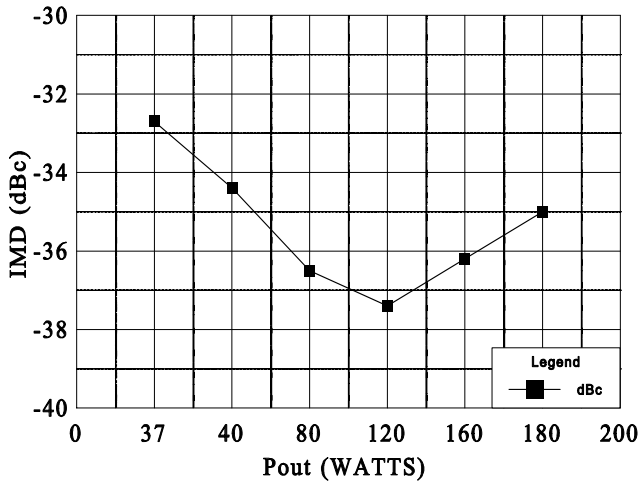
DC SAFE OPERATING AREA



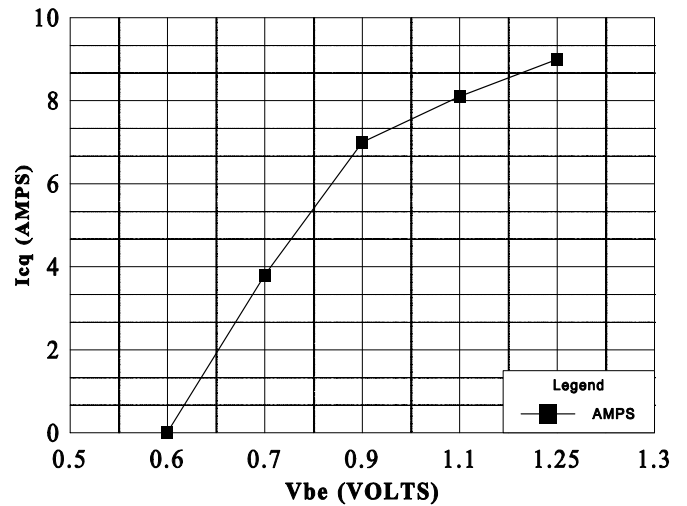
POWER OUTPUT vs POWER INPUT



IMD vs Pout

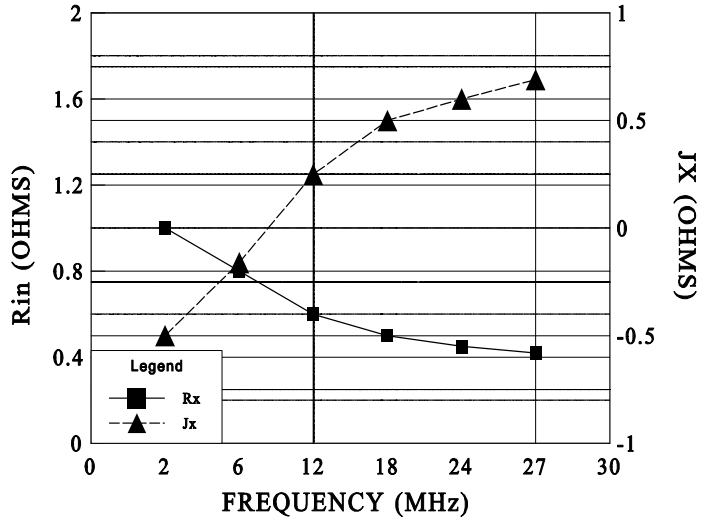


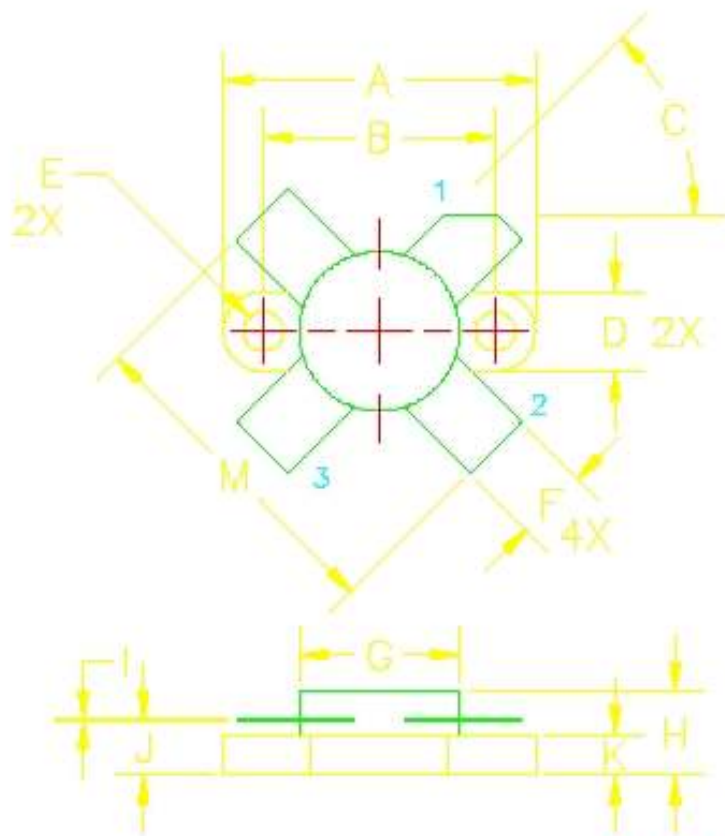
Icq vs Vbe



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Zin vs FREQUENCY

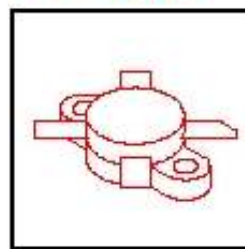




DIM	MILLIMETER	±TOL	INCHES	±TOL
A	24.76	.13	.975	.005
B	18.42	.13	.725	.005
C	45°	5°	45°	5°
D	6.35	.13	.250	.005
E	3.17	.13	.125	.005
F	5.71	.13	.225	.005
G	12.70	.13	.500 DIA	.005
H	6.60	REF	.260	REF
I	0.13	.02	.005	.001
J	4.32	.25	.170	.010
K	2.59	.25	.102	.010
M	31.75	MAX	1.250	MAX

STYLE 1:
 PIN1 = COLLECTOR
 2 = BASE (2X)
 3 = EMITTER

STYLE 2:
 PIN1 = COLLECTOR
 2 = EMITTER (2X)
 3 = BASE



DWG NO.

55HX