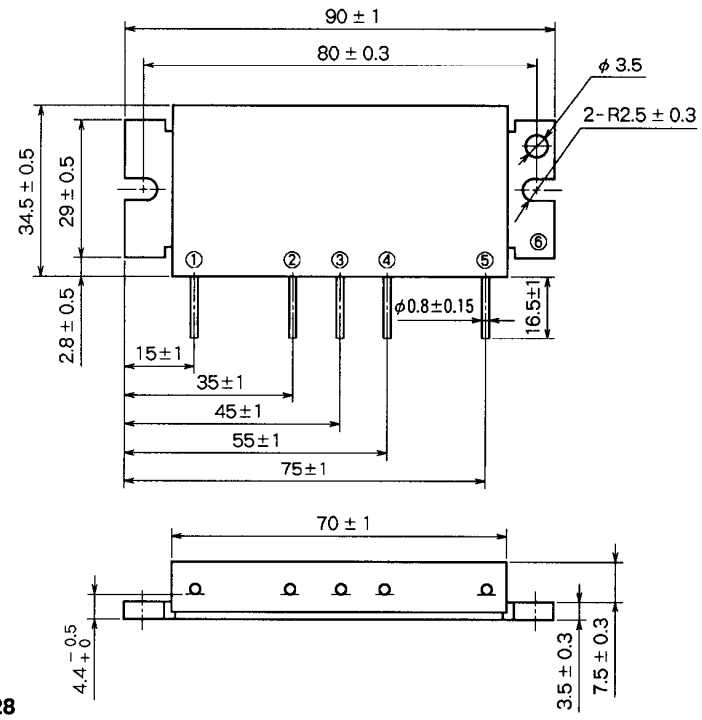
M67728

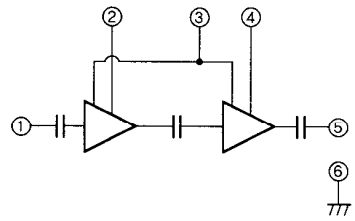
430-450MHz, 12.5V, 55W, SSB MOBILE RADIO

OUTLINE DRAWING

Dimensions in mm



BLOCK DIAGRAM



PIN :
①Pin : RF INPUT
②Vcc1 : 1st. DC SUPPLY
③VBB : BASE BIAS SUPPLY
④Vcc2 : 2nd. DC SUPPLY
⑤Po : RF OUTPUT
⑥GND : FIN

ABSOLUTE MAXIMUM RATINGS (Tc = 25℃ unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage		16	V
VBB	Base bias		10	V
Icc	Total current		25	A
Pin(max)	Input power	ZG = ZL = 50 Ω, Vcc1 ≦ 12.5V	14	W
Po(max)	Output power	ZG = ZL = 50 Ω	78	W
Tc(OP)	Operation case temperature		− 30 to 110	℃
Tstg	Storage temperature		− 40 to 110	℃

Note. Above parameters are guaranteed independently.

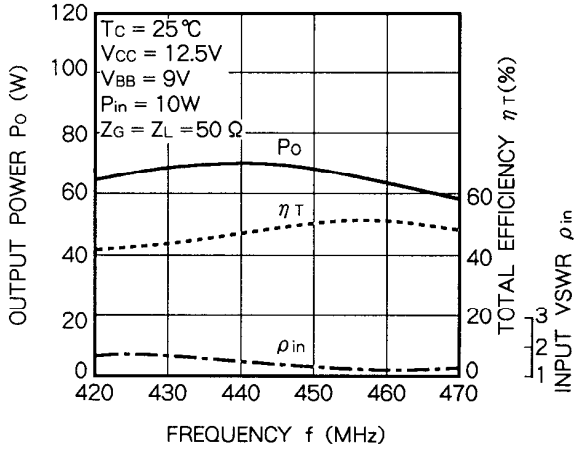
ELECTRICAL CHARACTERISTICS (Tc = 25℃ unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Pin = 10W VBB = 9V Vcc = 12.5V ZG = ZL = 50 Ω	430	450	MHz
Po	Output power		55		W
η T	Total efficiency		40		%
2fo	2nd. harmonic			− 30	dBc
3fo	3rd. harmonic			− 35	dBc
ρ in	Input VSWR			2.8	−
−	Load VSWR tolerance	Vcc1, 2 = 15.2V, VBB = 9V Po = 55W (Pin : controlled) Load VSWR = 8.8 : 1 (All phase), ZG = 50 Ω	No degradation or destroy		−

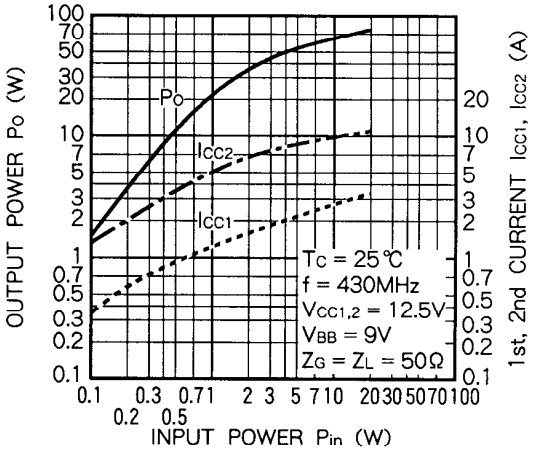
Note : Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

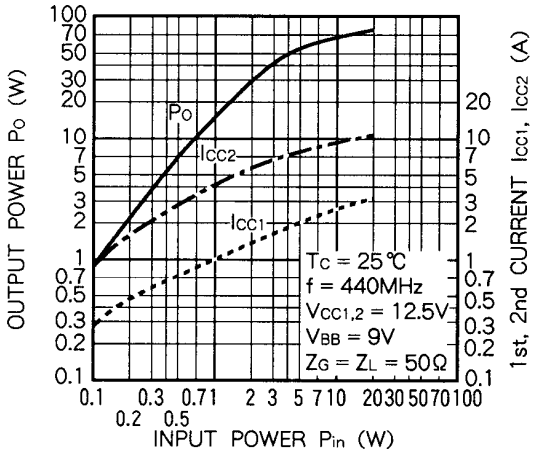
OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR VS. FREQUENCY CHARACTERISTICS



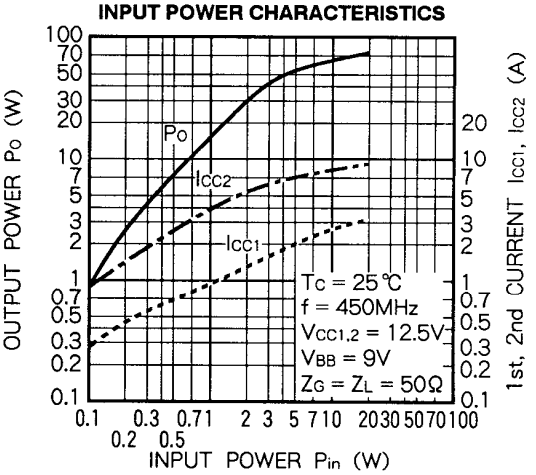
OUTPUT POWER, 1st, 2nd CURRENT VS. INPUT POWER CHARACTERISTICS



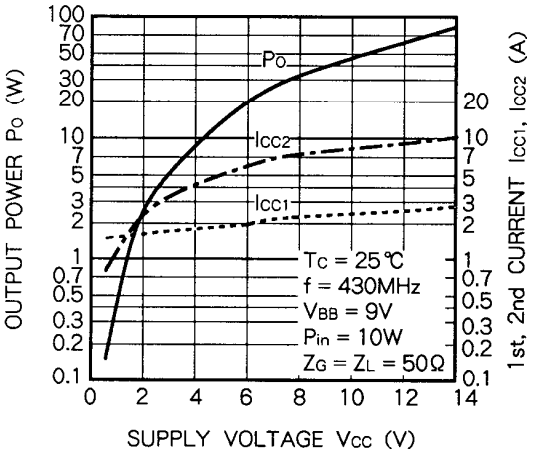
OUTPUT POWER, 1st, 2nd CURRENT VS. INPUT POWER CHARACTERISTICS



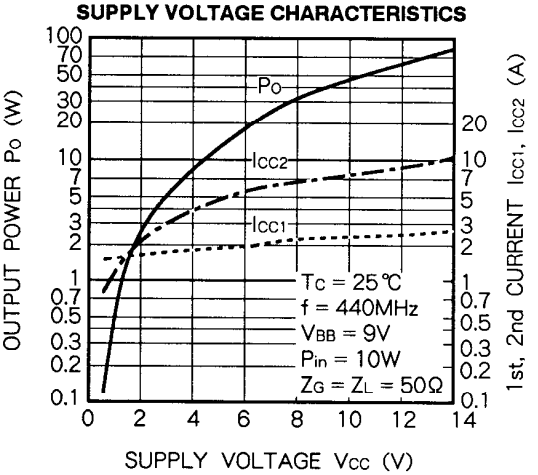
OUTPUT POWER, 1st, 2nd CURRENT VS. INPUT POWER CHARACTERISTICS



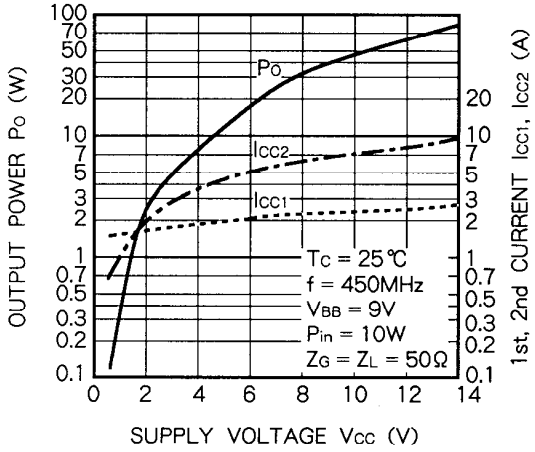
OUTPUT POWER, 1st, 2nd CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



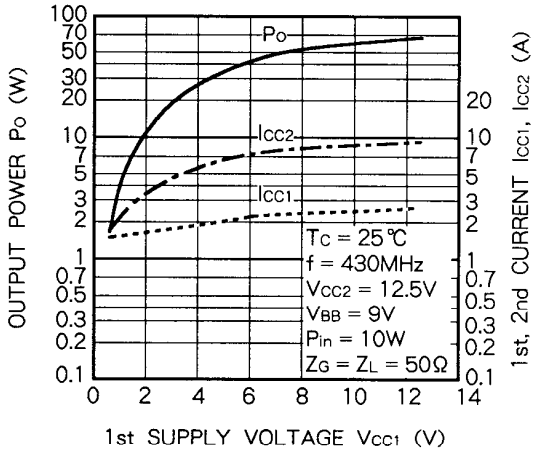
OUTPUT POWER, 1st, 2nd CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



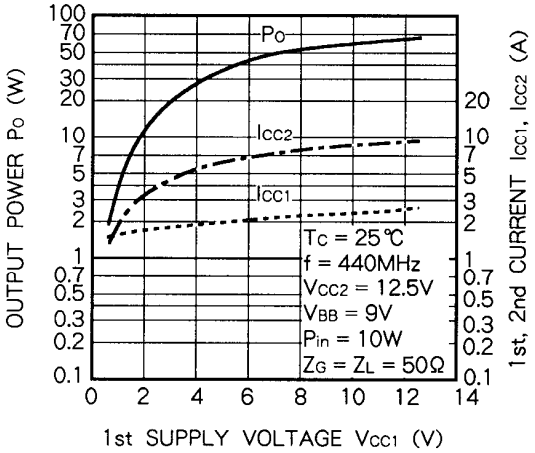
OUTPUT POWER, 1st, 2nd CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER, 1st, 2nd CURRENT VS. 1st VOLTAGE CHARACTERISTICS



OUTPUT POWER, 1st, 2nd CURRENT VS. 1st VOLTAGE CHARACTERISTICS



OUTPUT POWER, 1st , 2nd CURRENT VS. 1st VOLTAGE CHARACTERISTICS

