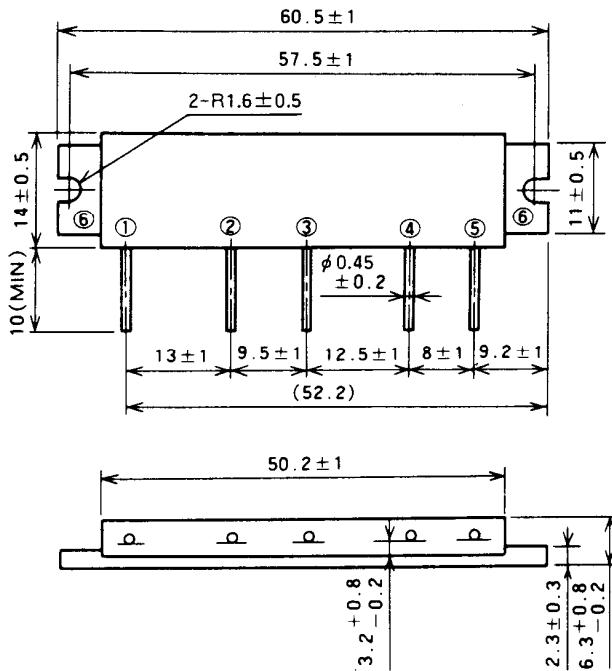


M67789

1465-1477MHz, 9.6V, 3W, FM PORTABLE RADIO

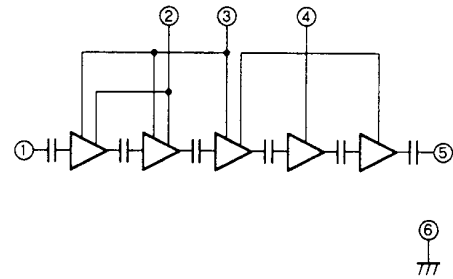
OUTLINE DRAWING

Dimensions in mm



H11

BLOCK DIAGRAM



PIN :

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

ABSOLUTE MAXIMUM RATINGS (Tc = 25 °C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Vcc1	Supply voltage	VBB ≤ 5.5V	12	V
Vcc2		Po ≤ 5W, VBB ≤ 5.5V, ZG = ZL = 50Ω	12	V
VBB	Base bias		5.5	V
Icc	Total current		3	A
Pin(max)	Input power	Vcc1 ≤ 9.6V, VBB=5V, ZG=ZL=50Ω	10	mW
Po(max)	Output power	ZG = ZL = 50 Ω	5	W
Tc(OP)	Operation case temperature		- 30 to 110	°C
Tstg	Storage temperature		- 40 to 110	°C

Note. Above parameters are guaranteed independently.

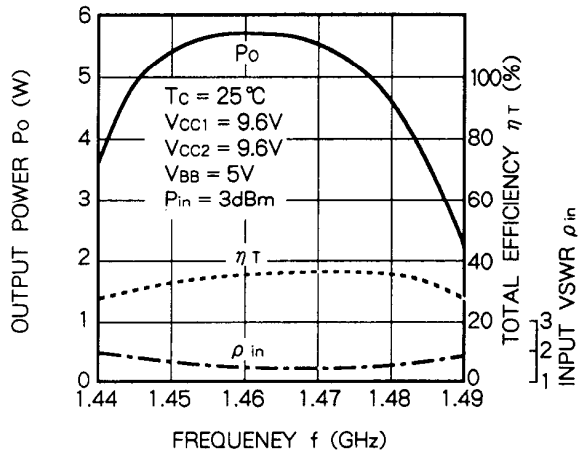
ELECTRICAL CHARACTERISTICS (Tc = 25 °C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Vcc1 = 9.6V VBB = 5V, Vcc2 = 9.6V, Pin = 2mW ZG = ZL = 50 Ω	1465	1477	MHz
Po	Output power		3		W
ηT	Total efficiency		30		%
2fo	2nd. harmonic			- 25	dBc
3fo	3rd. harmonic			- 30	dBc
ρin	Input VSWR			2.5	-
-	Load VSWR tolerance	VBB = 5V, Vcc2 = 11V Po = 3W(Vcc1 : controlled) Pin = 2mW, ZG = 50Ω Load VSWR=10:1 (All phase), 5sec.	No degradation or destroy		-

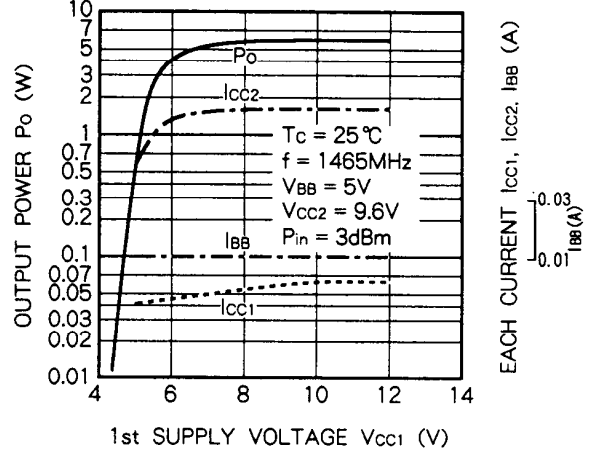
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

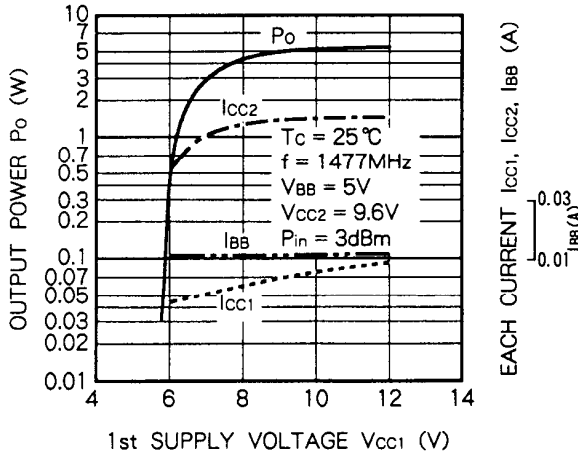
OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR
VS. FREQUENCY CHARACTERISTICS



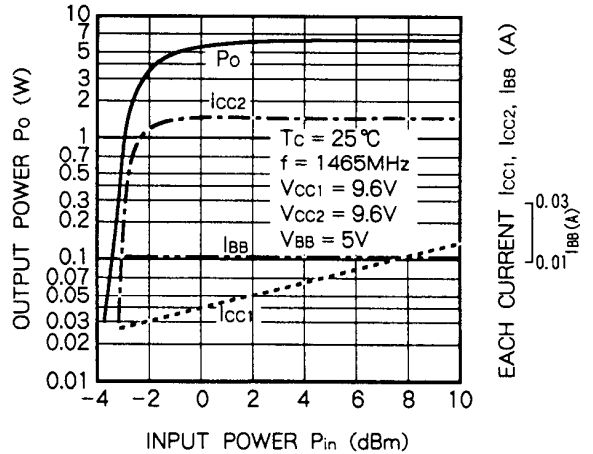
OUTPUT POWER, EACH CURRENT VS.
1st SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS.
1st SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS.
INPUT POWER CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS.
INPUT POWER CHARACTERISTICS

