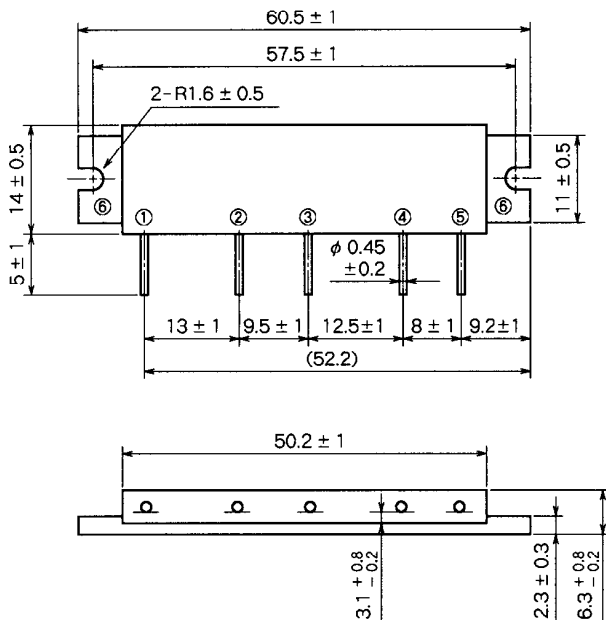


M67769A

890-915MHz, 12.5V, 13W, FM MOBILE RADIO

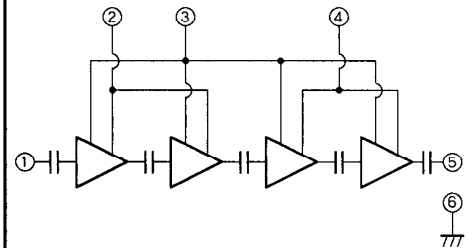
OUTLINE DRAWING

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 (T_c = 25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc1}	Supply voltage		9	V
V _{cc2}			17	V
V _{BB}	Base bias		8.5	V
I _{cc}	Total current		4	A
P _{in(max)}	Input power	V _{cc1} ≤ 8V, V _{BB} = 8V, Z _G = Z _L = 50Ω	7	mW
P _{O(max)}	Output power	Z _G = Z _L = 50 Ω	20	W
T _{c(OP)}	Operation case temperature		- 30 to 110	°C
T _{stg}	Storage temperature		- 40 to 110	°C

Note. Above parameters are guaranteed independently.

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

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	V _{cc1} = 8V	890	915	MHz
P _o	Output power	V _{BB} = 8V	13		W
η _T	Total efficiency	V _{cc2} = 12.5V	30		%
2f _o	2nd. harmonic	P _{in} = 2mW		- 30	dBc
ρ _{in}	Input VSWR	Z _G = Z _L = 50 Ω		2.8	-
-	Load VSWR tolerance	V _{BB} = 8V, V _{cc2} = 15.2V, P _o = 13W (V _{cc1} : controlled), P _{in} = 2mW Load VSWR=20:1 (All phase), 5sec.	No degradation or destroy		-

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