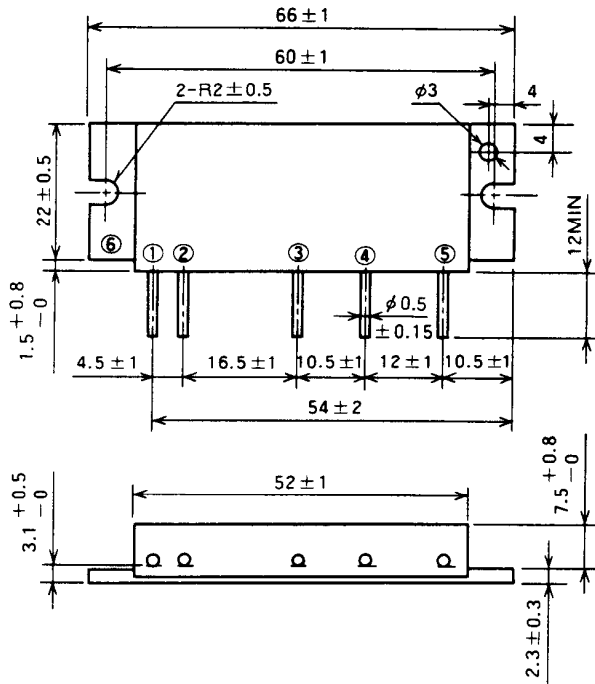


# M67769C

889-915MHz, 12.5V, 13W, FM MOBILE RADIO

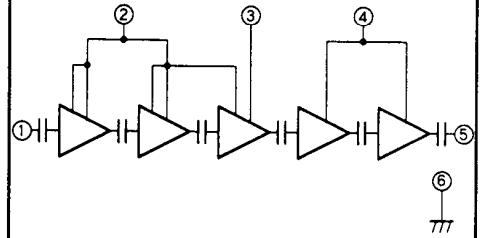
### OUTLINE DRAWING

Dimensions in mm



H3

### BLOCK DIAGRAM



PIN :

- ①Pin : RF INPUT
- ②Vcc1 : 1st. DC SUPPLY
- ③Vcc2 : 2nd. DC SUPPLY
- ④Vcc3 : 3rd. DC SUPPLY
- ⑤Po : RF OUTPUT
- ⑥GND : FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
Vcc1	Supply voltage		9	V
Vcc2			15	V
Vcc3			17	V
Icc	Total current		5	A
Pin(max)	Input power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω, Vcc1 ≤ 8V	4	mW
Po(max)	Output power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	20	W
Tc(OP)	Operation case temperature		- 30 to 110	°C
Tstg	Storage temperature		- 40 to 110	°C

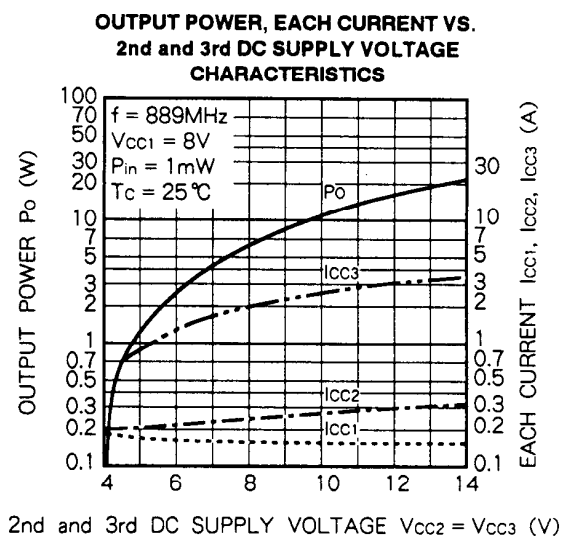
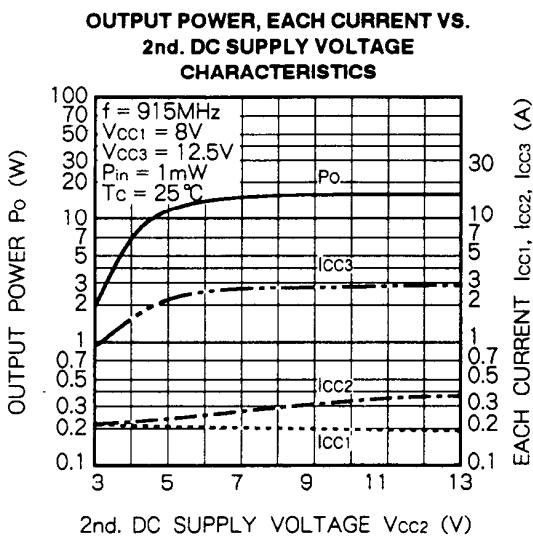
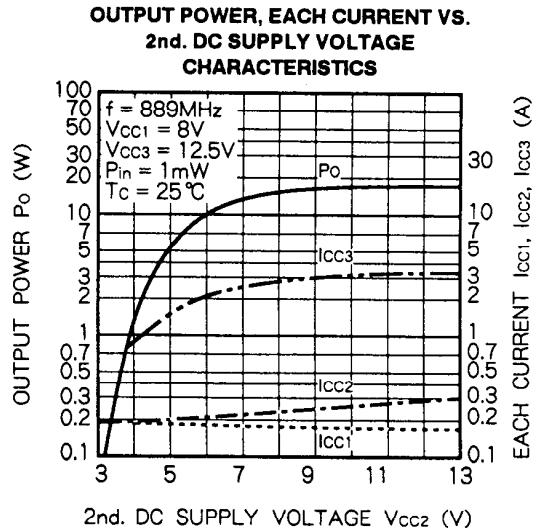
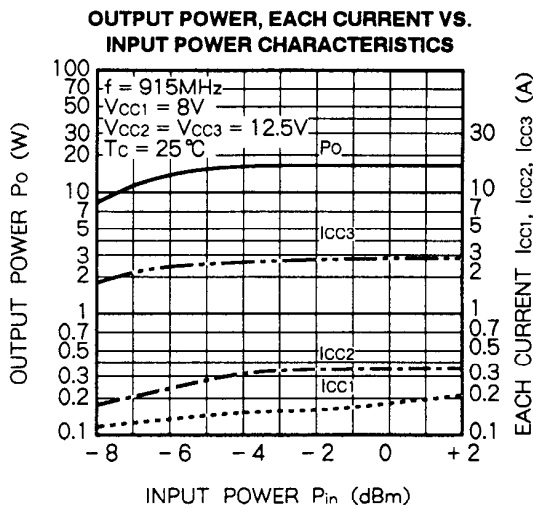
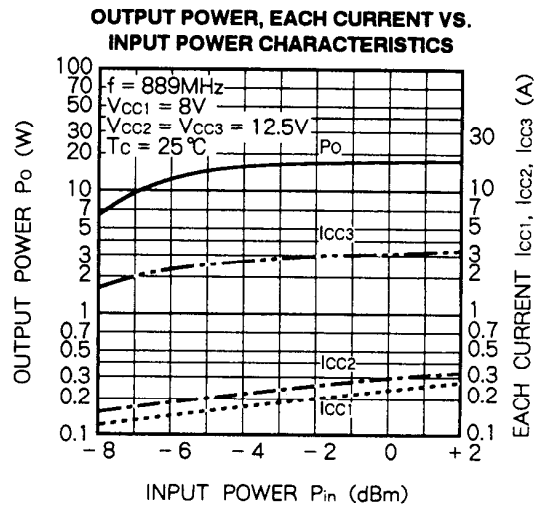
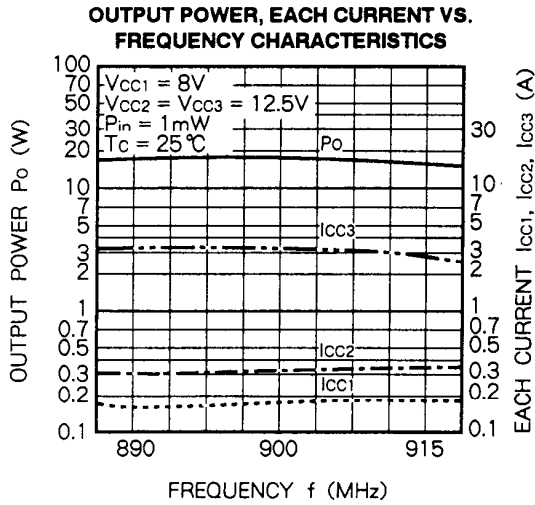
Note. Above parameters are guaranteed independently.

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

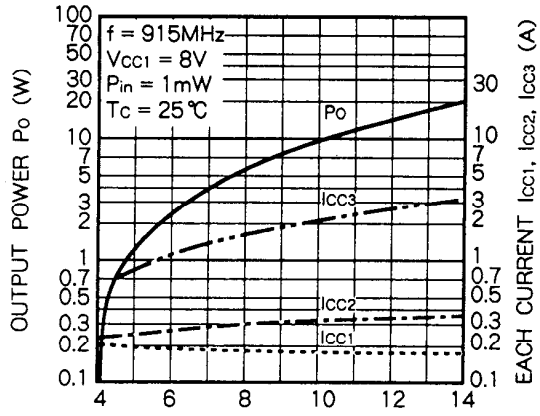
Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Vcc1 = 8V Vcc2 = Vcc3 = 12.5V Pin = 1mW Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	889	915	MHz
Po	Output power		13		W
η <sub>T</sub>	Total efficiency		30		%
2fo	2nd. harmonic			- 30	dBc
ρ <sub>in</sub>	Input VSWR			2.8	-
-	Load VSWR tolerance	Vcc1 = 8V, Vcc3 = 15.2V Po = 13W (Vcc2 : controlled) Pin = 1mW Load VSWR=20:1(All phase), 5sec.	No degradation or destroy		-

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

TYPICAL PERFORMANCE DATA



OUTPUT POWER, EACH CURRENT VS.  
2nd and 3rd DC SUPPLY VOLTAGE  
CHARACTERISTICS



2nd and 3rd DC SUPPLY VOLTAGE  $V_{cc2} = V_{cc3}$  (V)