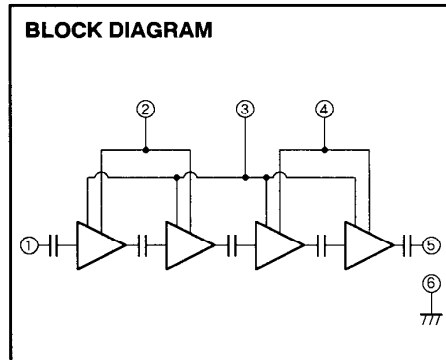
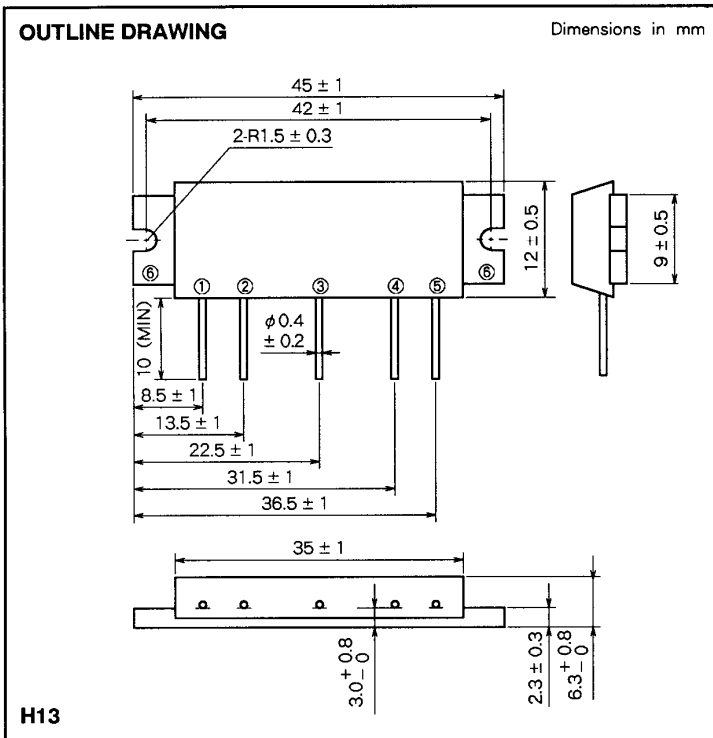


# M67715

1240-1300MHz, 8V, 1.2W, SSB PORTABLE RADIO



- 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		9	V
Vcc2			16	V
VBB	Base bias		9	V
Icc	Total current		1.5	A
Pin(max)	Input power	ZG = ZL = 50 Ω	10	mW
Po(max)	Output power	ZG = ZL = 50 Ω	4	W
Tc(OP)	Operation case temperature		- 20 to 100	°C
Tstg	Storage temperature		- 40 to 110	°C

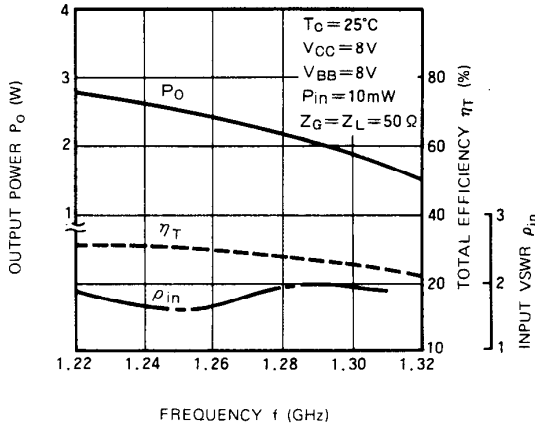
Note. Above parameters are guaranteed independently.

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

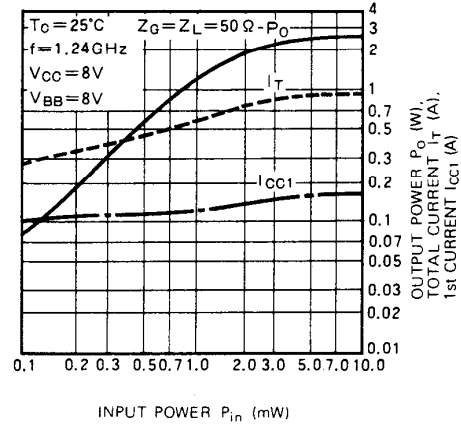
Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Vcc1 = Vcc2 = VBB = 8V Pin = 10mW ZG = ZL = 50 Ω	1240	1300	MHz
Po	Output power		1.2		W
ηT	Total efficiency		18		%
2fo	2nd. harmonic			- 30	dBc
3fo	3rd. harmonic			- 35	dBc
ρin	Input VSWR			2.5	-
-	Load VSWR tolerance		Vcc1 = 9V, Vcc2 = 15.2V, VBB = 9V Po = 1.5W(Pin : controlled), ZG = 50Ω Load VSWR=10:1 (All phase), 5sec	No degradation or destroy	
IMD3	3rd. inter modulation distortion	Vcc1=Vcc2=VBB=8V Po(PEP)=1.26W, Δf=20kHz, ZG=ZL=50Ω		- 23	dBc
IMD5	5th. inter modulation distortion	Vcc1=Vcc2=VBB=8V Po(PEP)=1.26W, Δf=20kHz, ZG=ZL=50Ω		- 30	dBc

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

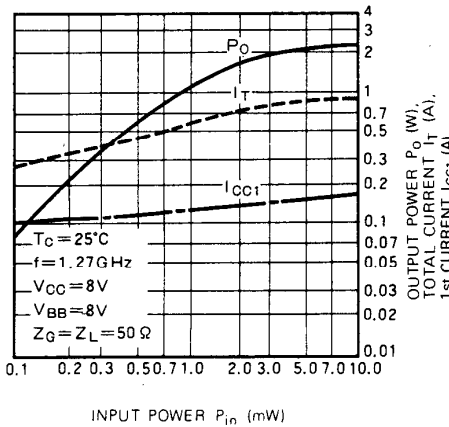
**TYPICAL PERFORMANCE DATA**  
**OUTPUT POWER, TOTAL EFFICIENCY,**  
 **$\rho_{in}$  VS. FREQUENCY CHARACTERISTICS**



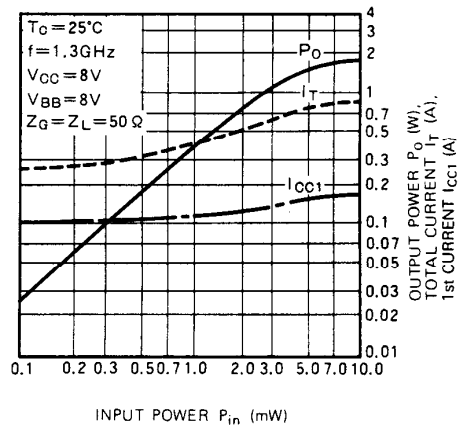
**OUTPUT POWER, TOTAL CURRENT,**  
**1st CURRENT VS. INPUT**  
**POWER CHARACTERISTICS**



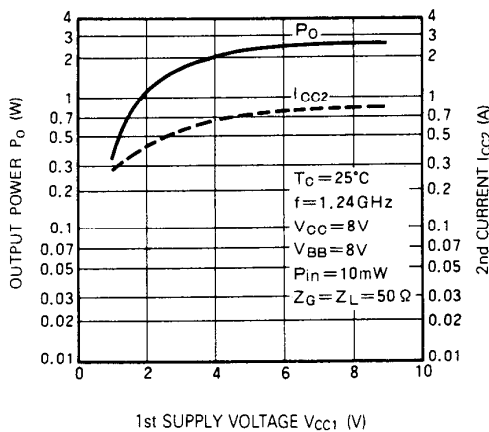
**OUTPUT POWER, TOTAL CURRENT,**  
**1st CURRENT VS. INPUT**  
**POWER CHARACTERISTICS**



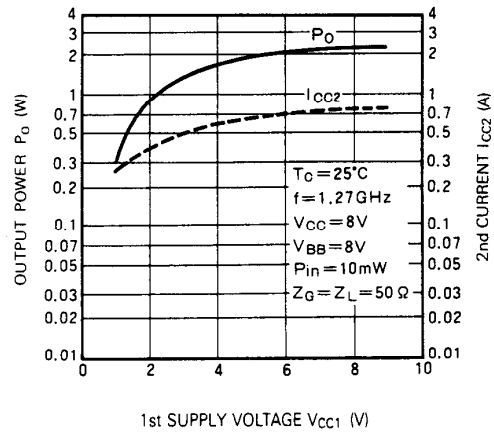
**OUTPUT POWER, TOTAL CURRENT,**  
**1st CURRENT VS. INPUT**  
**POWER CHARACTERISTICS**



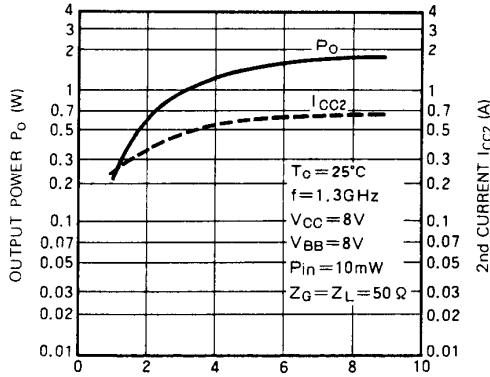
**OUTPUT POWER, 2nd CURRENT**  
**VS. 1st SUPPLY VOLTAGE**  
**CHARACTERISTICS**



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

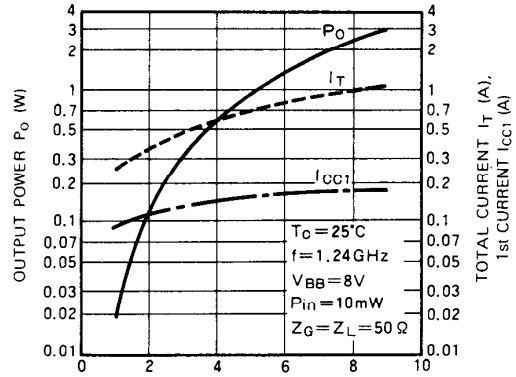


**OUTPUT POWER, 2nd CURRENT VS. 1st SUPPLY VOLTAGE CHARACTERISTICS**



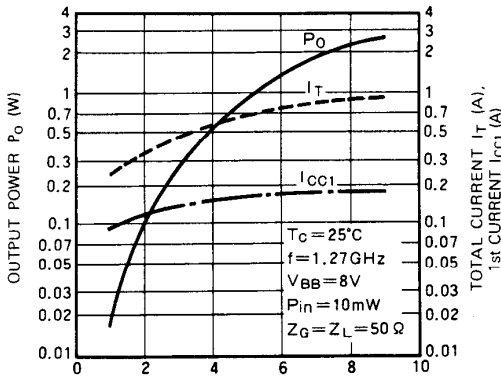
1st SUPPLY VOLTAGE  $V_{CC1}$  (V)

**OUTPUT POWER, TOTAL CURRENT, 1st CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS**



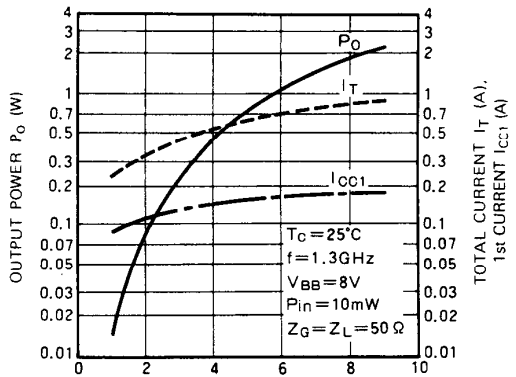
SUPPLY VOLTAGE  $V_{CC}$  (V)

**OUTPUT POWER, TOTAL CURRENT, 1st CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS**



SUPPLY VOLTAGE  $V_{CC}$  (V)

**OUTPUT POWER, TOTAL CURRENT, 1st CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS**



SUPPLY VOLTAGE  $V_{CC}$  (V)

**2nd, 3rd HARMONIC VS. FREQUENCY CHARACTERISTICS**

