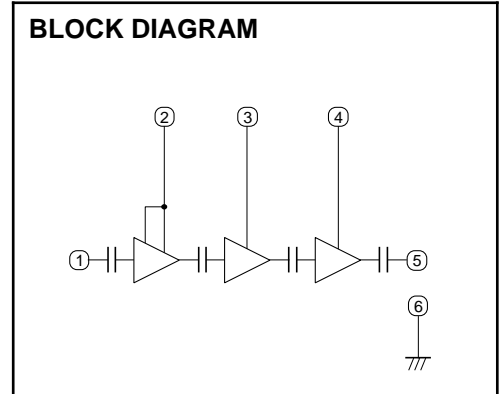
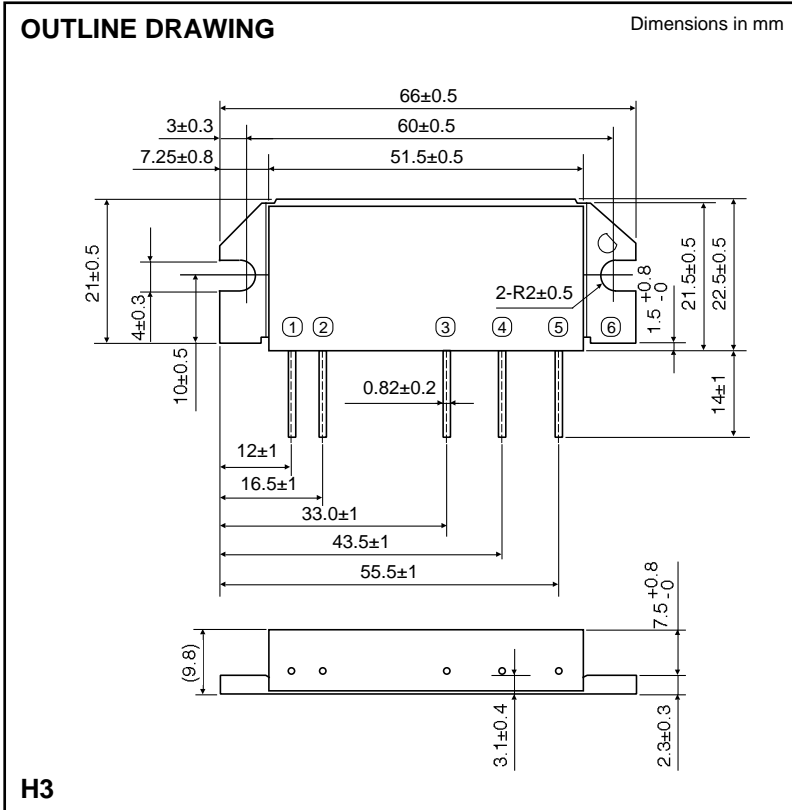


MITSUBISHI RF POWER MODULE
M68703HA

440-470MHz, 12.5V, 50W, FM MOBILE RADIO



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

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

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage	ZG=ZL=50	17	V
Icc	Total current	ZG=ZL=50	20	A
P _{in} (max)	Input power	ZG=ZL=50 , Vcc1 12.5V	600	mW
P _O (max)	Output power	ZG=ZL=50 , Vcc1 12.5V	70	W
T _C (OP)	Operation case temperature	ZG=ZL=50 , Vcc1 12.5V	-30 to +110	°C
T _{stg}	Storage temperature		-40 to +110	°C

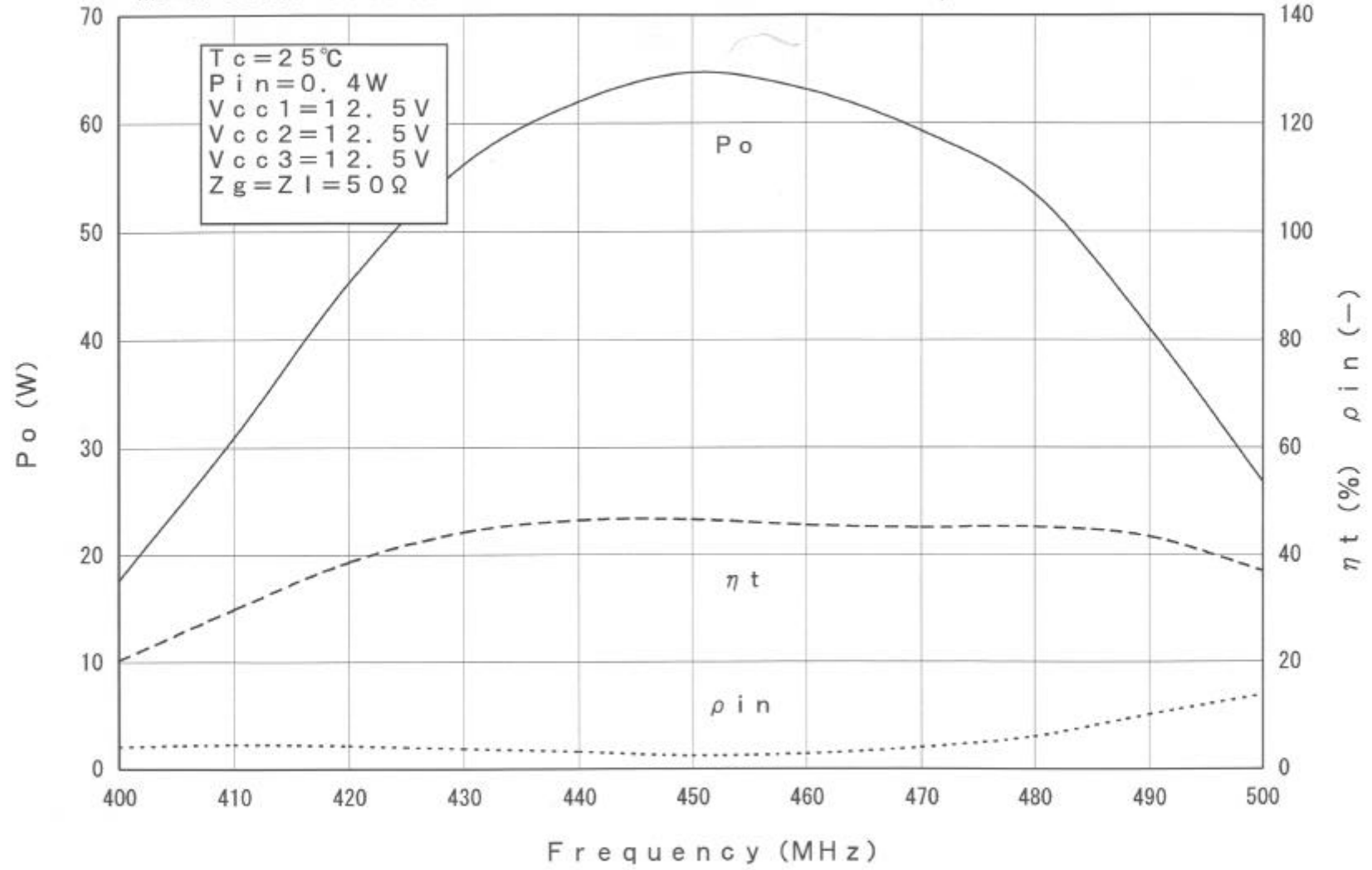
Note. Above parameters are guaranteed independently.

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

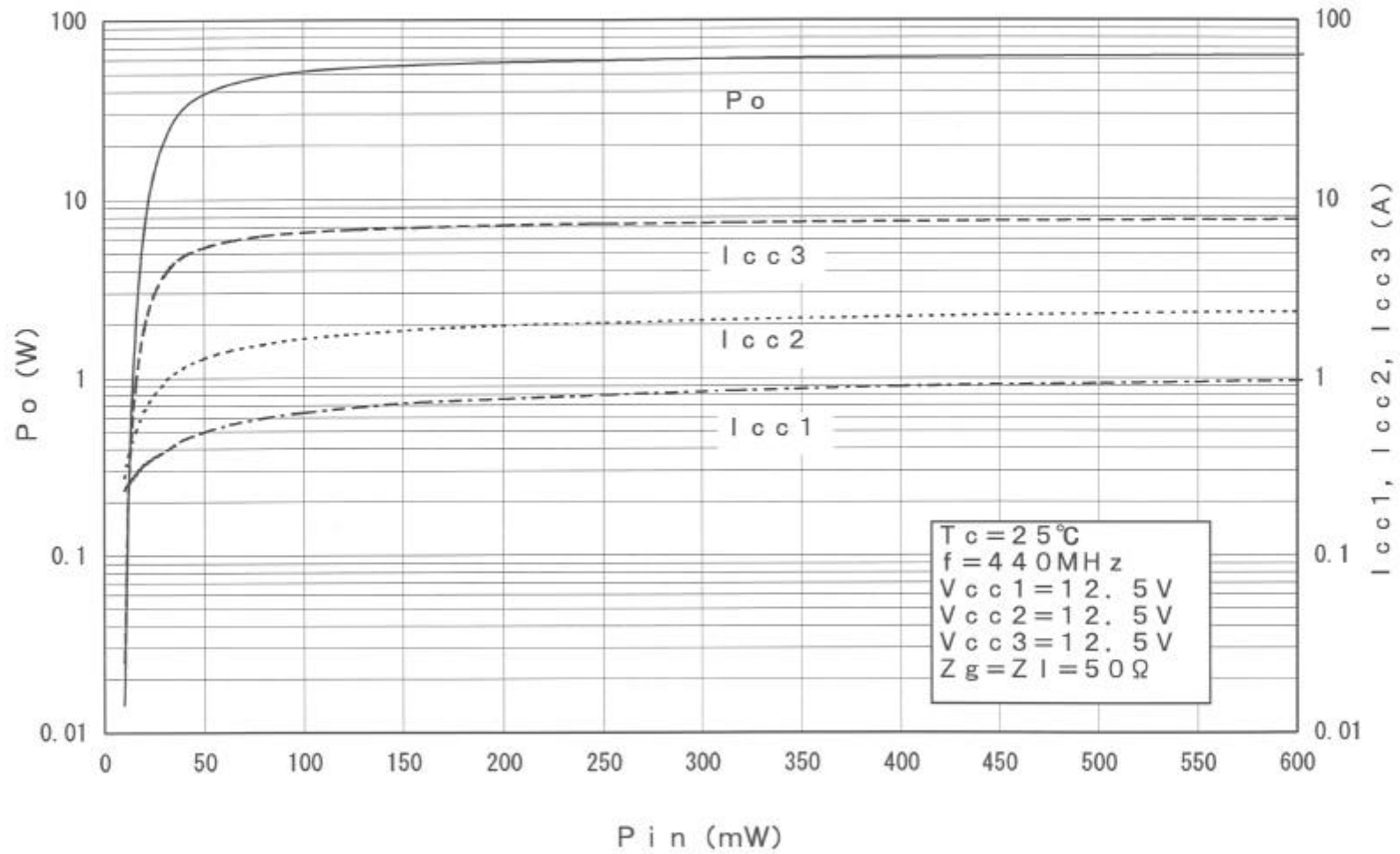
Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Vcc=12.5V, P _{in} =400mW, ZG=ZL=50	440	470	MHz
P _O	Output power		50		W
η	Total efficiency		35		%
2fo	2nd. harmonic			-30	dBc
3fo	3rd. harmonic			-30	dBc
in	Input VSWR			3	-
-	Load VSWR tolerance	Vcc=15.2V, P _O =50W (P _{in} :controlled) ZG=50 , Load VSWR=8:1 (All phase)	No degradation or destroy		-

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

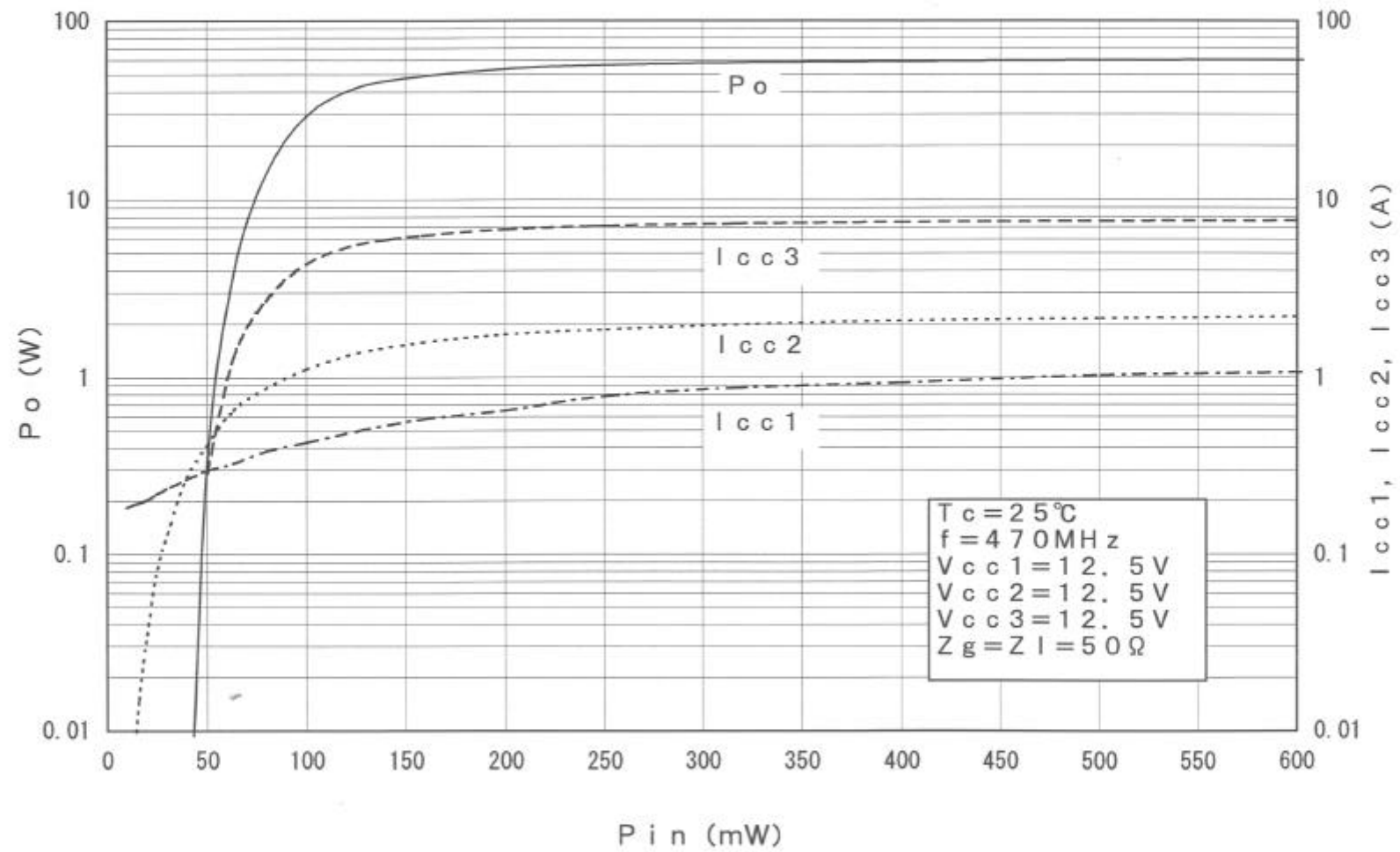
M68703HA OUTPUT POWER TOTAL EFFICIENCY ρ_{in} VS FREQUENCY



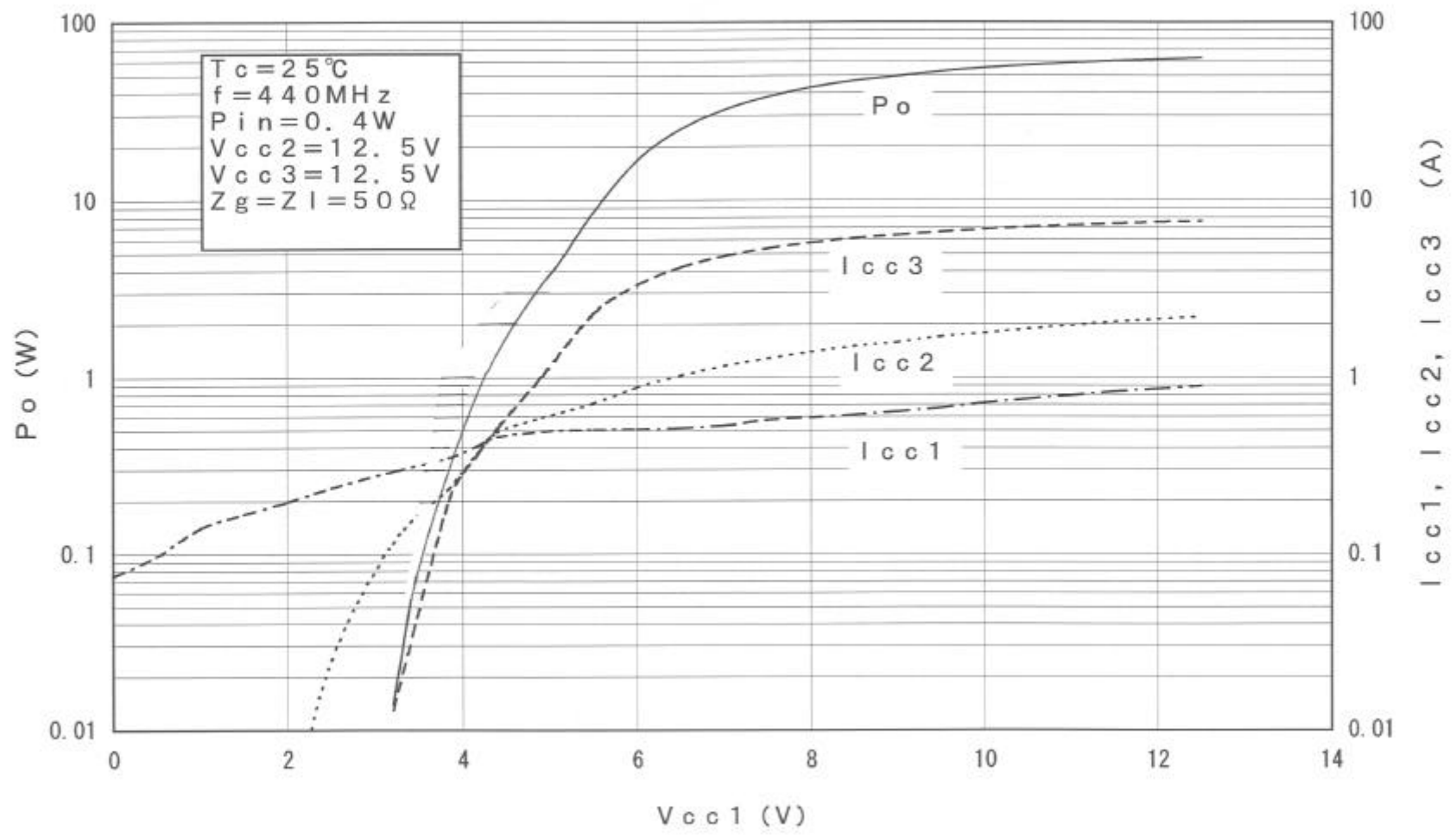
M68703HA OUTPUT POWER VS INPUT POWER



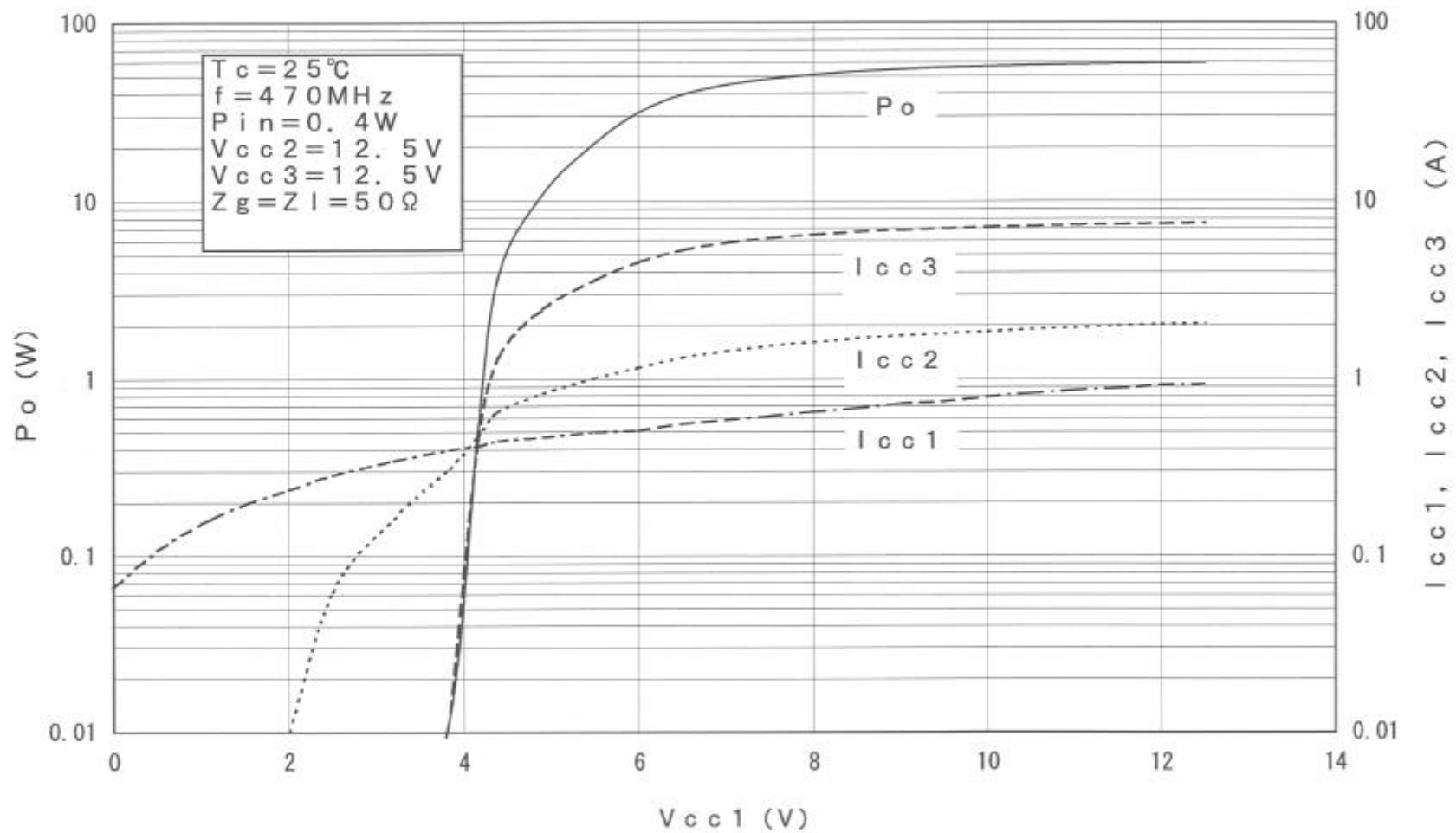
M68703HA OUTPUT POWER VS INPUT POWER



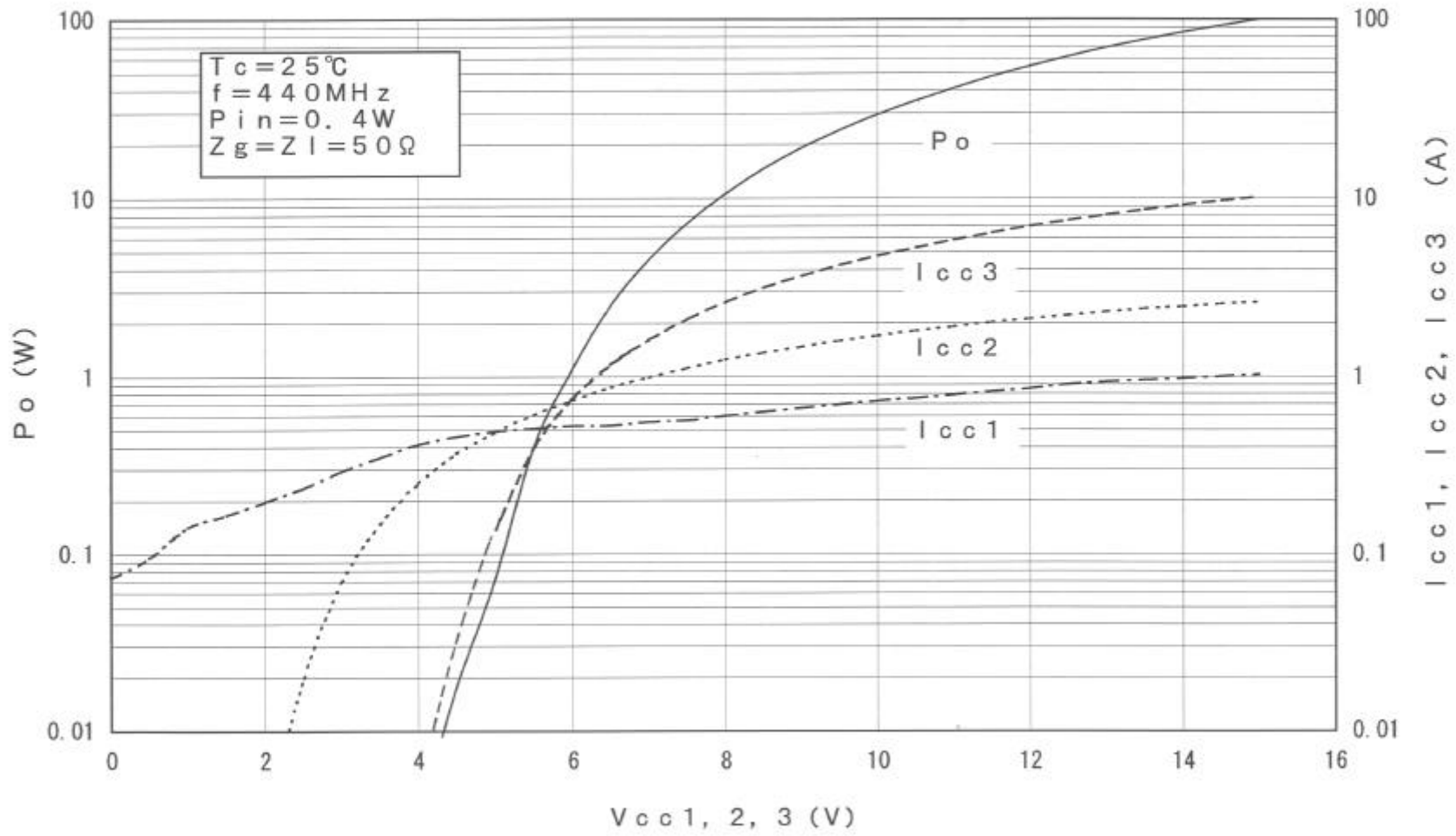
M68703HA OUTPUT POWER VS SUPPLY VOLTAGE



M68703HA OUTPUT POWER VS SUPPLY VOLTAGE



M68703HA OUTPUT POWER VS SUPPLY VOLTAGE



M68703HA OUTPUT POWER VS SUPPLY VOLTAGE

