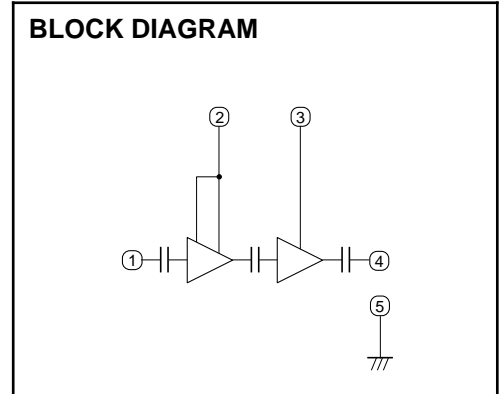
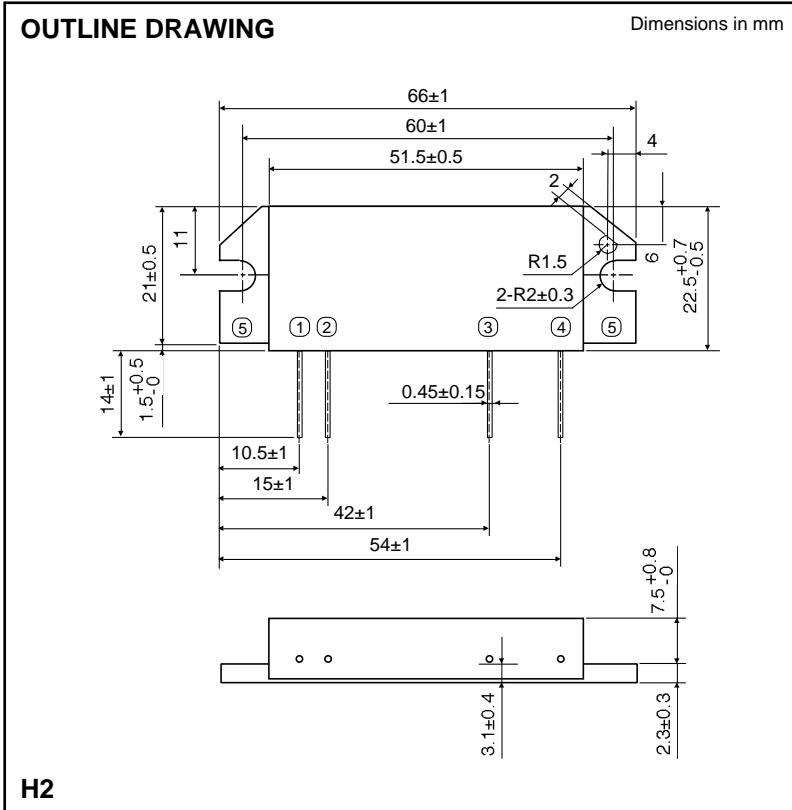


MITSUBISHI RF POWER MODULE
M68750

144-148MHz, 12.5V, 27W, FM MOBILE RADIO



PIN:
 ① Pin : RF INPUT
 ② Vcc1: 1st. DC SUPPLY
 ③ Vcc2: 2nd. DC SUPPLY
 ④ PO : RF OUTPUT
 ⑤ 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	7	A
P _{in} (max)	Input power	ZG=ZL=50 , Vcc1 12.5V	400	mW
P _O (max)	Output power	ZG=ZL=50 , Vcc1 12.5V	40	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.

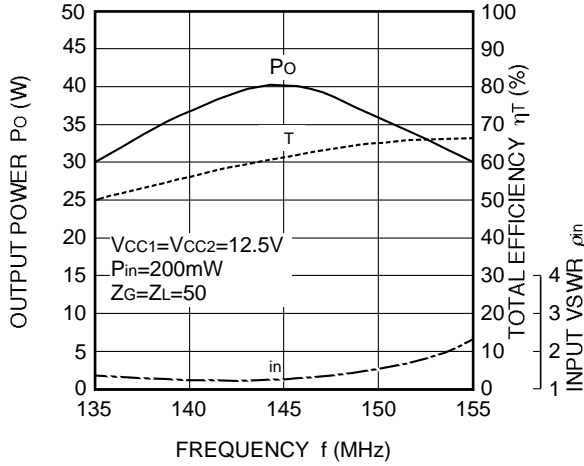
ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		144	148	MHz
P _O	Output power	Vcc1=Vcc2=12.5V, P _{in} =200mW ZG=ZL=50	27		W
η	Total efficiency		50		%
2f _o	2nd. harmonic			-25	dBc
3f _o	3rd. harmonic			-30	dBc
in	Input VSWR			2.8	-
-	Load VSWR tolerance	Vcc1=Vcc2=15.2V P _O =30W (P _{in} :controlled), ZG=50 Load VSWR=20:1 (All phase)	No degradation or destroy		-

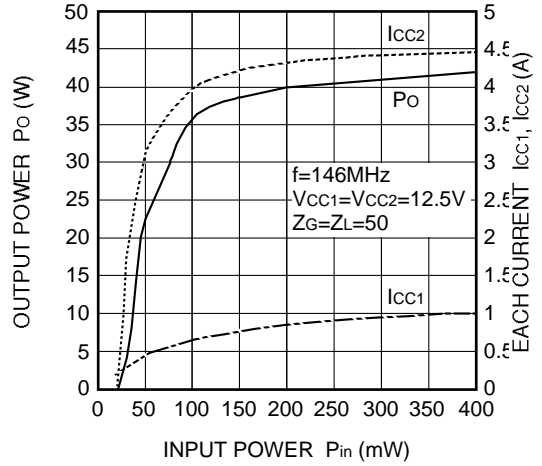
Note. Above parameters, ratings, limits and test conditions are subject to change.

TYPICAL PERFORMANCE DATA

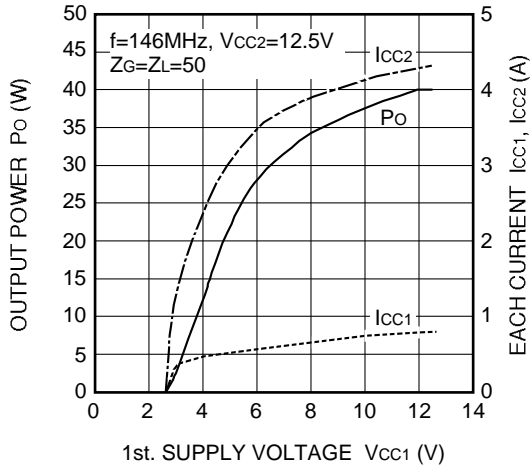
OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR VS. FREQUENCY



OUTPUT POWER, EACH CURRENT VS. INPUT POWER



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



OUTPUT POWER, 2nd. CURRENT VS. 2nd. SUPPLY VOLTAGE

