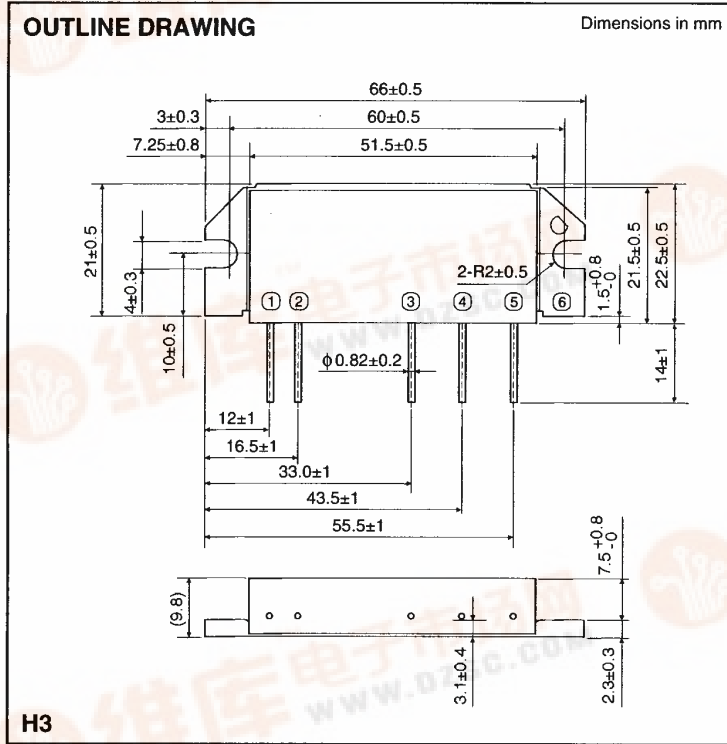


MITSUBISHI RF POWER MODULE
M68703LA

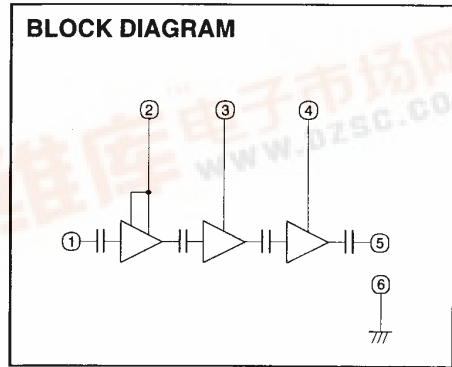
400-430MHz, 12.5V, 50W, FM MOBILE RADIO

OUTLINE DRAWING

Dimensions in mm



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
Vcc	Supply voltage	ZG=ZL=50Ω	17	V
Icc	Total current	ZG=ZL=50Ω	20	A
P _{in} (max)	Input power	ZG=ZL=50Ω, VCC1≤12.5V	600	mW
P _O (max)	Output power	ZG=ZL=50Ω, VCC1≤12.5V	70	W
T _C (OP)	Operation case temperature	ZG=ZL=50Ω, 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} =300mW, ZG=ZL=50Ω	400	430	MHz
P _O	Output power		50		W
η _T	Total efficiency		35		%
2f _o	2nd. harmonic			-30	dBc
3f _o	3rd. harmonic			-30	dBc
p _{in}	Input VSWR			3	-
-	Load VSWR tolerance	VCC=15.2V, P _O =50W (P _{in} :controlled) ZG=50Ω, Load VSWR=8:1 (All phase)	No degradation or destroy		-

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