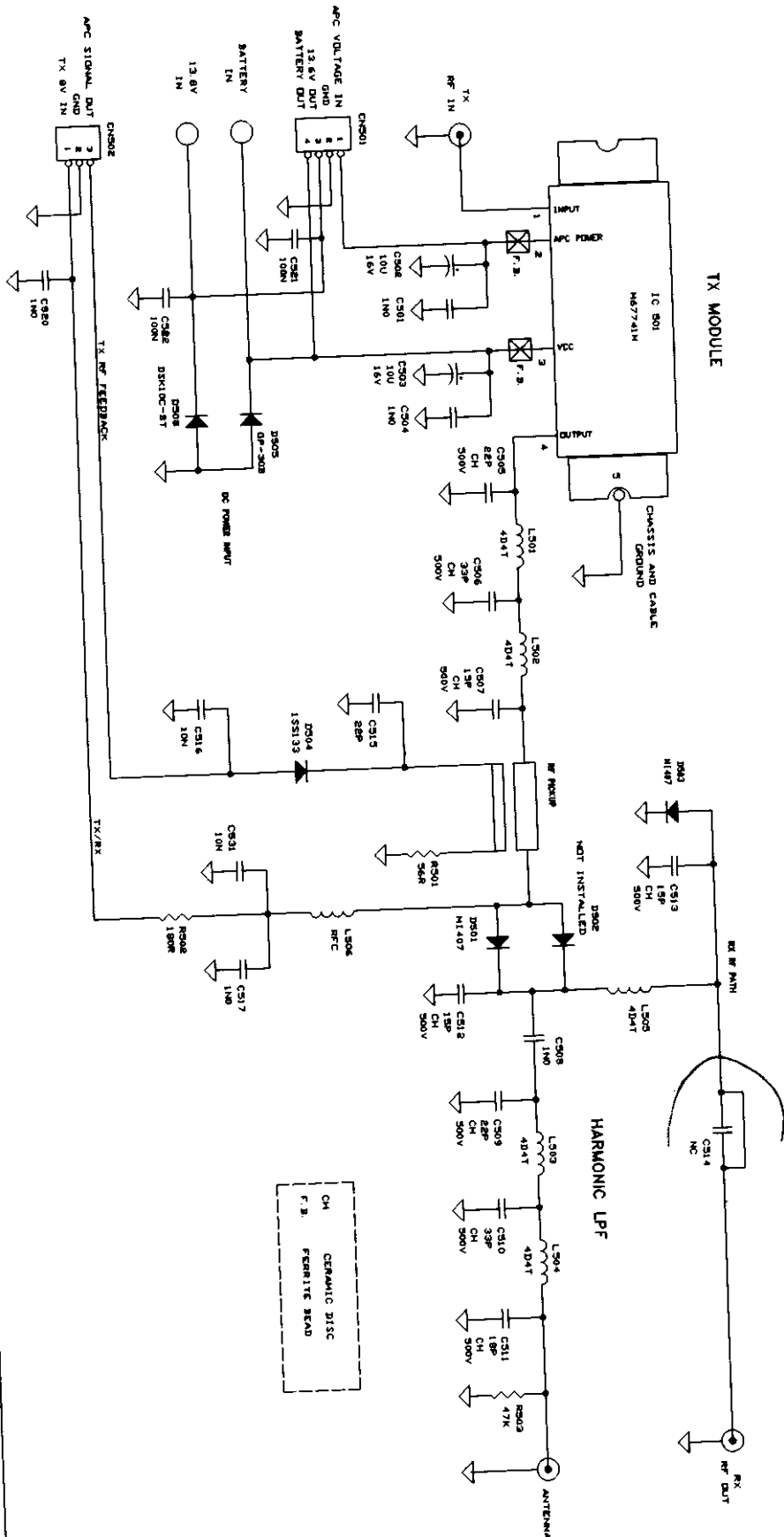


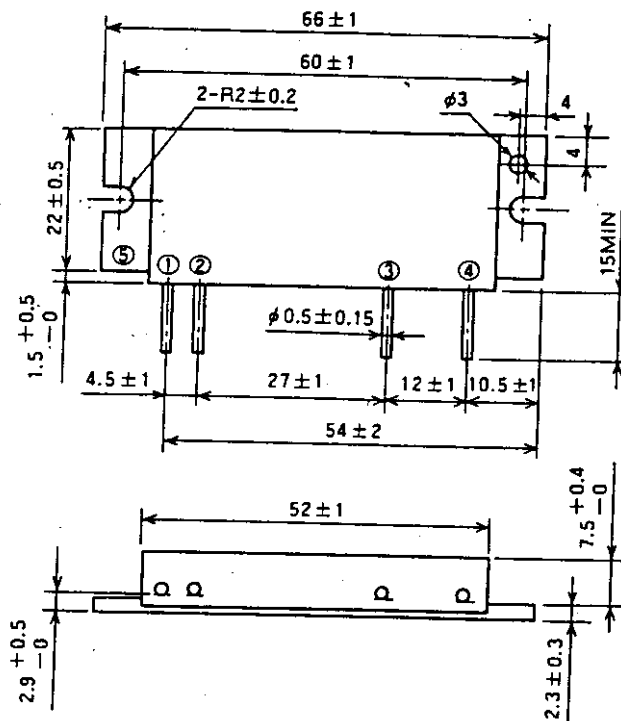


TAD RADIO OF CANADA INC.			
TYPE	M-10 TX POWER AMPLIFIER		
Size	Document Number	085,141.01	REV
Date:	SEPTEMBER 23, 1988	Sheet	1 of 1

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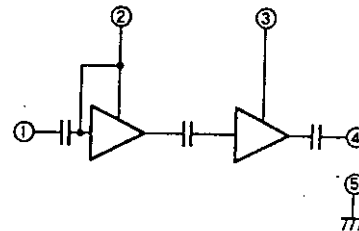
OUTLINE DRAWING

Dimensions in mm



H2

BLOCK DIAGRAM



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

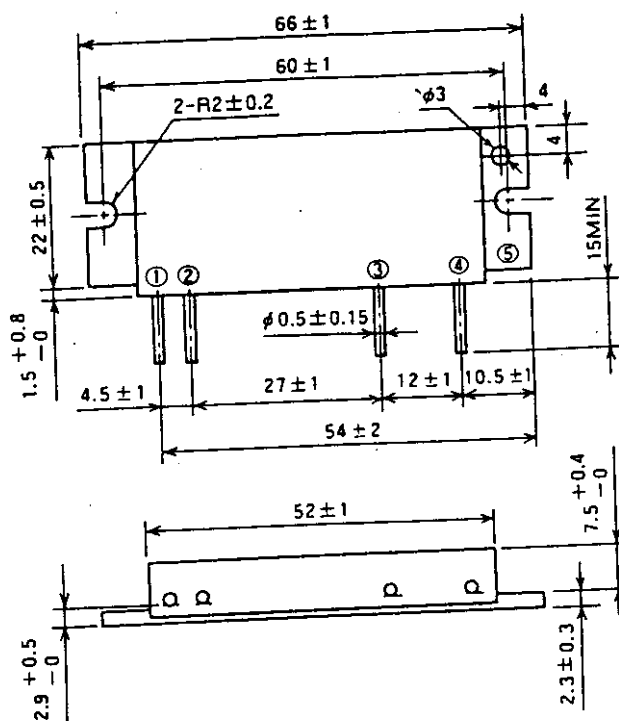
FCC ID: H7CM-10A

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc}	Supply voltage		17	V
I _{cc}	Total current		7	A
P _{in(max)}	Input power	Z _θ = Z _L = 50 Ω, V _{cc1} ≤ 12.5V	0.5	W
P _{o(max)}	Output power	Z _θ = Z _L = 50 Ω	35	W
T _{c(OP)}	Operation case temperature		- 30 to 110	°C
T _{stg}	Storage temperature		- 40 to 110	°C

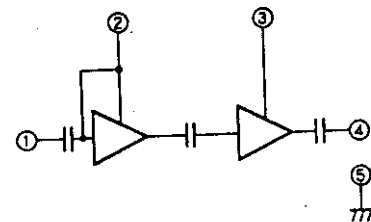
Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	$P_{in} = 0.2W$ $V_{cc} = 12.5V$ $Z_0 = Z_L = 50 \Omega$	150	175	MHz
Po	Output power		30		W
η_T	Total efficiency		40		%
2fo	2nd. harmonic			- 25	dBc
3fo	3rd. harmonic			- 30	dBc
ρ_{in}	Input VSWR			3.3	-
-	Load VSWR tolerance	$V_{cc} = 15.2V$ $P_o = 30W$ (P_{in} : controlled) Load VSWR $\geq 20:1$ (All phase), 2sec. $Z_0 = 50 \Omega$	No degradation or destroy		-

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

Dimensions in mm



BLOCK DIAGRAM



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

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc}	Supply voltage		17	V
I _{cc}	Total current		7	A
P _{in(max)}	Input power	V _{cc1} ≤ 12.5V, Z _θ = Z _L = 50Ω	500	mW
P _{o(max)}	Output power	Z _θ = Z _L = 50Ω	35	W
T _{c(OP)}	Operation case temperature		- 30 to 110	°C
T _{stg}	Storage temperature		- 40 to 110	°C

ELECTRICAL CHARACTERISTICS ($T_c = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Vcc1 = Vcc2 = 12.5V Pin = 200mW ZG = ZL = 50Ω	156	168	MHz
Po	Output power		28		W
η T	Total efficiency		40		%
2fo	2nd. harmonic			- 25	dBc
3fo	3rd. harmonic			- 30	dBc
ρin	Input VSWR			3.3	-
-	Load VSWR tolerance	Vcc1 = Vcc2 = 15.2V Po = 30W (Pin : controlled) Load VSWR ≥ 20:1 (All phase). ZG = 50Ω	No degradation or destroy		-

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