

STK403-130

2002.12.28

TENTATIVE

1. Case Outline 15Pins (See attached Package Outline Diagram)
2. Function 2 channels AF power amplifier
3. Application 100W audio use
4. Maximum Ratings / Ta=25°C

Item	Symbol	Conditions	Ratings	Unit
Maximum Power Supply Voltage 0	Vcc max(0)	Non- signal	+71.5	V
Maximum Power Supply Voltage	Vcc max(1)	Signal ,RL 6ohm	+63	V
Minimum Operation Supply Voltage	Vcc min		+10	V
#12 Maximum Operating Current *7	I _{ST OFF} max		0.6	mA
Thermal Resistance	Theta j-c	Per one power TR	1.7	°C/W
Junction Temperature	T _j max	Should satisfy T _j max and T _c max	150	°C
Operating Substrate Temperature	T _c max		125	°C
Storage Temperature	T _{stg}		-30 to +125	°C
Available Time for Load Short-circuit *4	t _s	V _{cc} =+44V,RL=6ohm,f=50Hz Po=100W,1ch drive	0.3	s

5. Operating Characteristics

T_c=25°C ,RL=6ohm(Non-inductive Load),R_g=600ohm,V_G=30dB

Item	Symbol	Conditions *2					Ratings			Unit
		V (V)	f (Hz)	Po (W)	THD (%)		MIN.	TYP.	MAX.	
Output Power *1	Po 1	+44	20 to 20k		0.4		96	100		W
	Po 2	+44	1k		10			150		
THD *1	THD 1	+44	20 to 20k	5.0		VG=30dB			0.4	%
	THD 2	+44	1k					0.01		
Frequency Characteristics *1	f _L ,f _H	+44		1.0		+0 -3 dB	20 to 50k			Hz
Input Impedance	r _i	+44	1k	1.0			55			kohm
Output Noise Voltage *3	V _{NO}	+53				R _g =2.2kohm			1.0	mVrms
Quiescent Current	I _{CC0}	+53				No load	20	45	80	mA
Output Neutral Voltage	V _N	+53					-70	0	+70	mV
#13 Stand-By Current	I _{ST ON}	+44				V _{#13} =5V #13PIN Resistance R1=13kohm			0	mA
#13 Operating Current	I _{ST OFF}	+44					0.25		0.6	mA

*Specifications and information herein are subject to change without notice.

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Note *1.1channel Operation.

*2.All tests are measured using a constant-voltage supply unless otherwise specified.

*3.The output noise voltage is peak value of an average-reading meter with a rms value scale(VTVM).

A regulated AC supply(50Hz) should be used to eliminate the effects of AC primary line flicker noise.

*4.Available time for load short-circuit and output noise voltage are measured using the specified transformer power supply.

*5.Please keep the condition always most below Voltage ‘-Pre Vcc(#1pin)’.

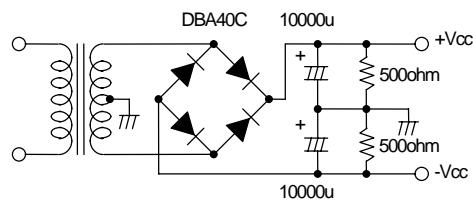
*6.In case of heat sink design, we request customer to design in the condition to have assumed market.

*7.Please specify resistance value by satisfying '#13(Stand-By)pin' Maximum Operating Current.

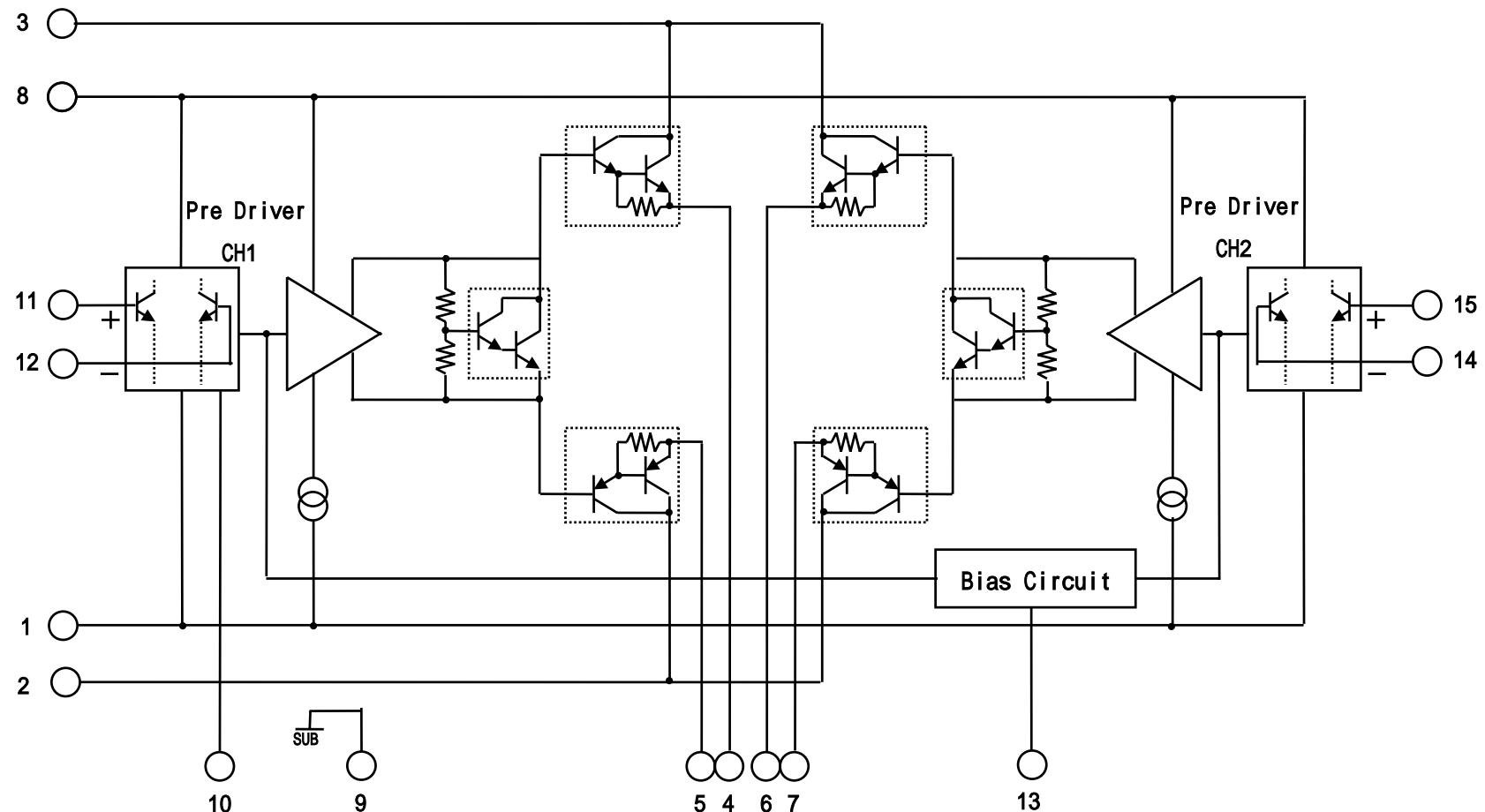
This Circuit change operation mode to give above V_{BE}(about 0.6v) voltage at '#13(Stand-By)pin'.

*8.The case of this Hybrid-IC is using thermoplastic adhesive.

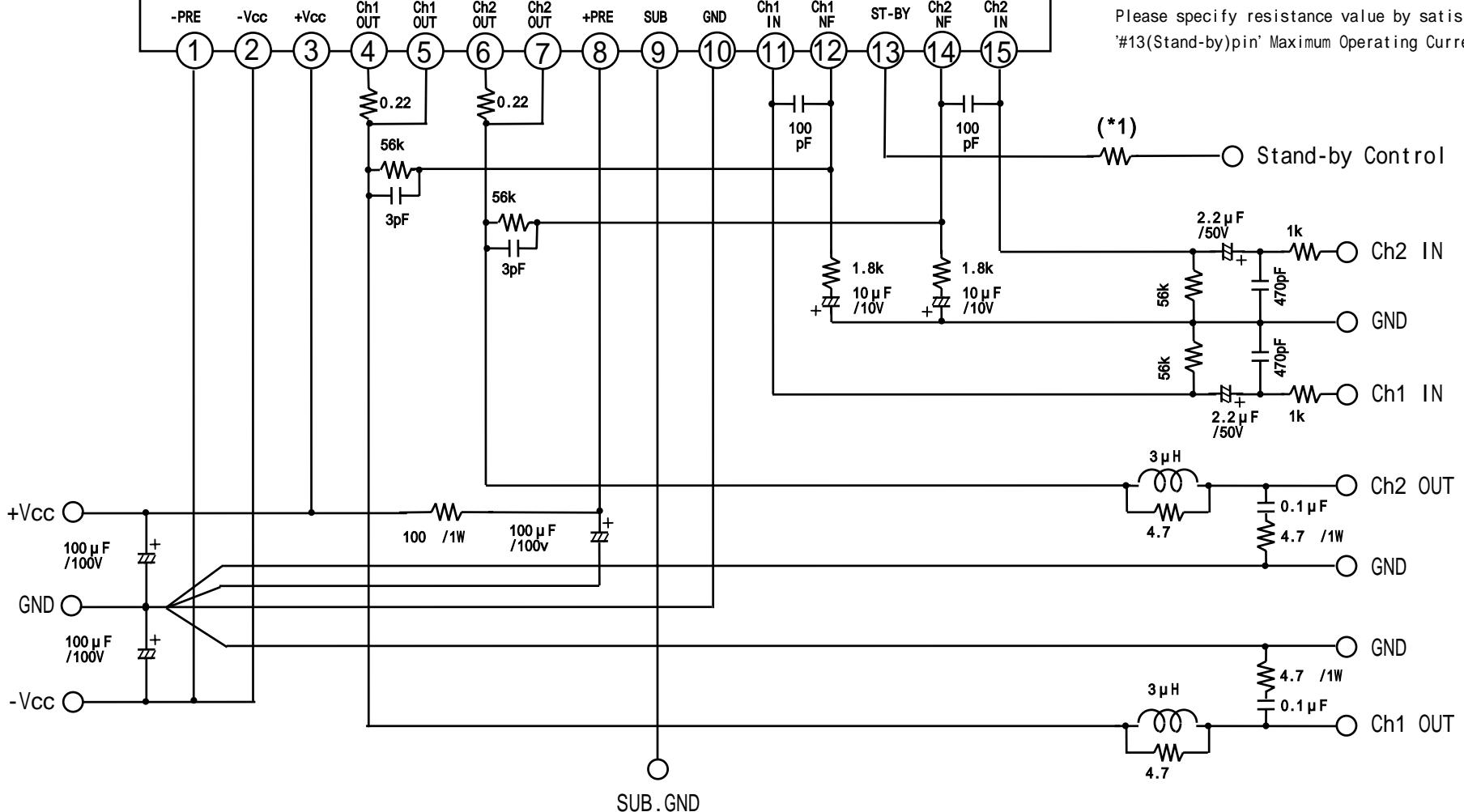
Specified Transformer Power Supply



(Equivalent to MG-250)

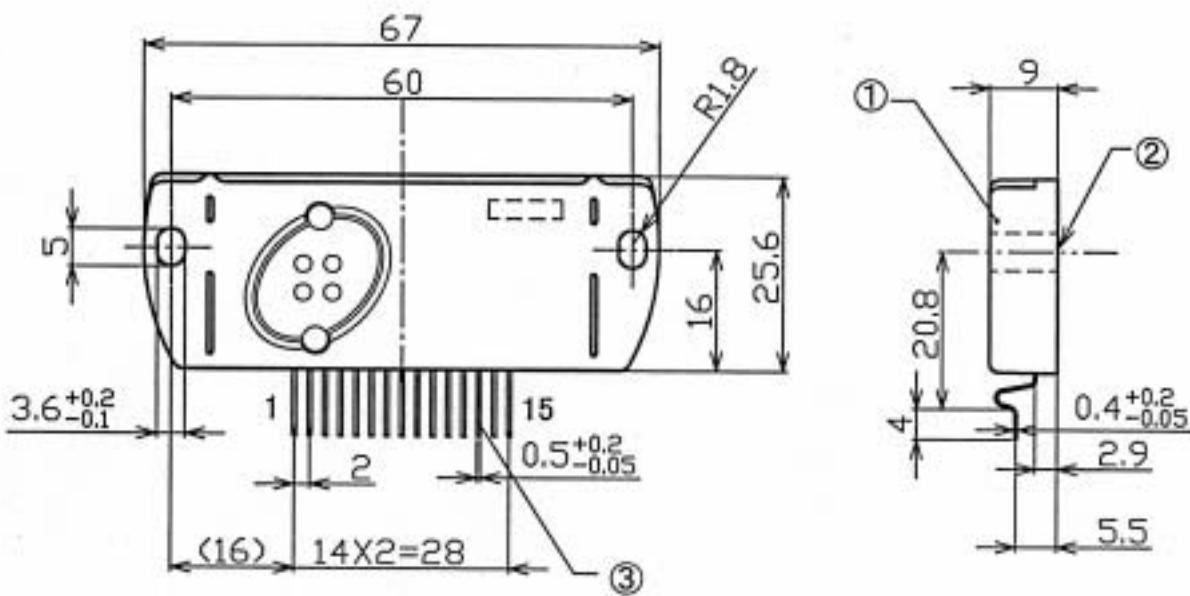


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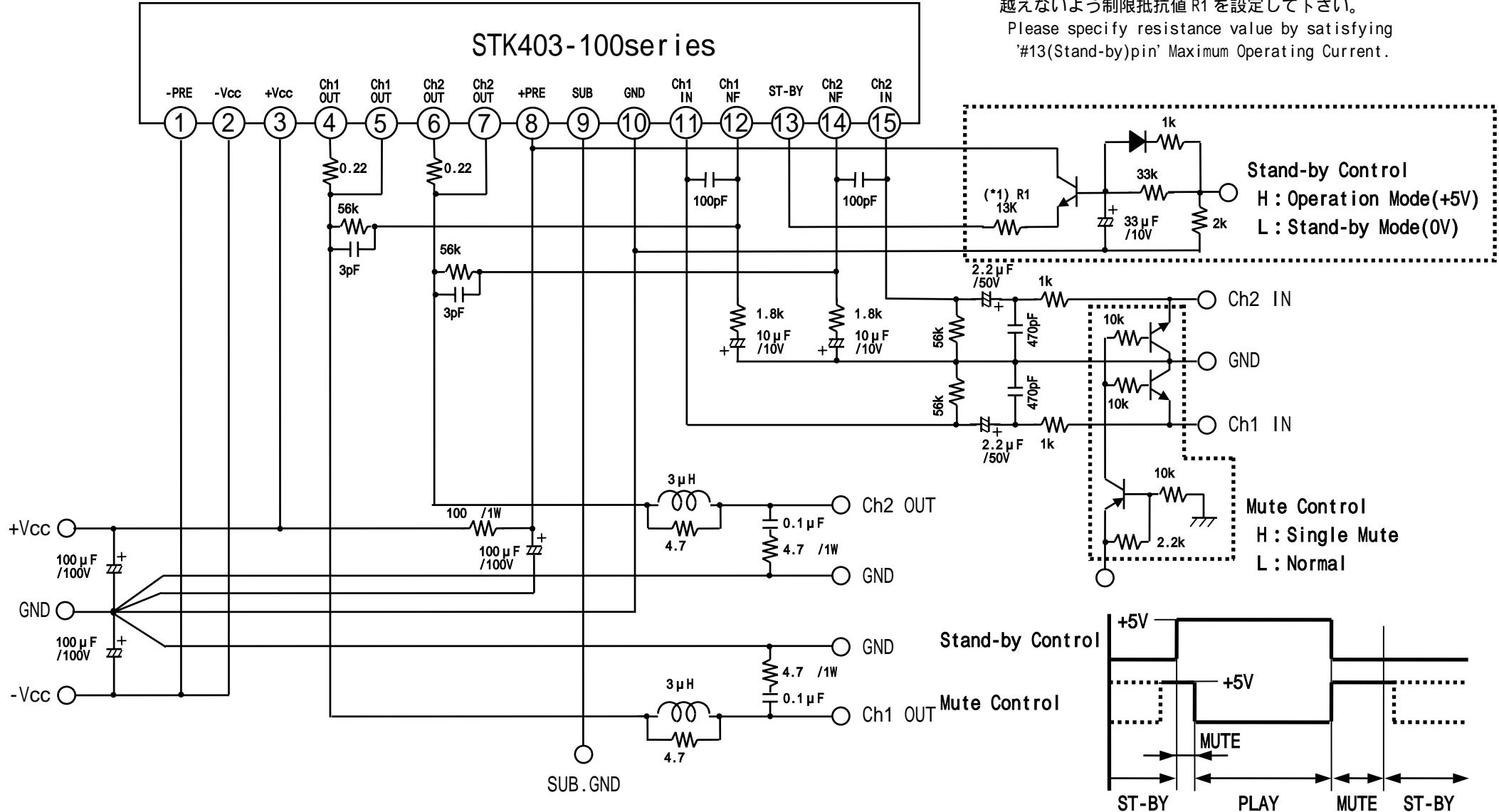
PACKAGE DIMENSION

SCALE	1/1	UNIT	mm
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		PARTS	MATERIAL	TREATMENT
①	CASE	PBT		
②	SUBSTRATE	IMST SUBSTRATE		
③	LEAD FRAME	SPCC-SB	COPPER / SOLDER PLATING	
DO NOT SCALE THIS DRAWING		TOLERANCES UNLESS OTHERWISE SPECIFIED	±0.5	④
DRAWN		DATE	Jul/22/2002	NAME _____
CHECK		APPROVAL		OUTLINE EIAJ _____ JEDEC _____ SANYO _____ PART No. _____

STK403-100series



(*1)Stand-by 端子(#13)の動作時流入電流が最大定格を
越えないよう制限抵抗値 R1 を設定して下さい。

Please specify resistance value by satisfying
'#13(Stand-by)pin' Maximum Operating Current.