

PRODUCT SPECIFICATION - DRAFT

Description

Transformer HF/Flyback/48W/80-140V/63kHz/THT

Customer

Tianlai

Cust P/N

Prax P/N

PI-103725-00

Edition

EDA

Date

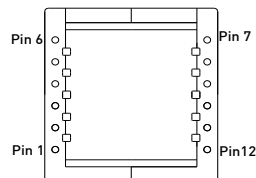
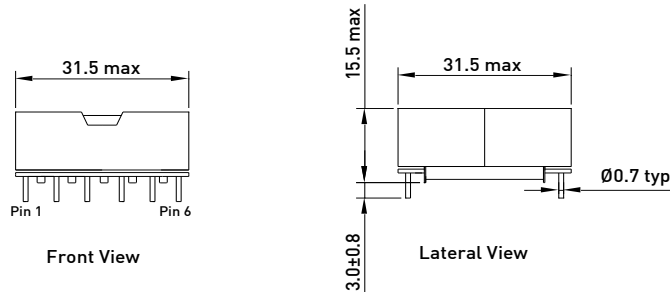
17-Jan-2025

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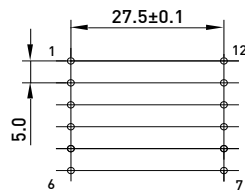
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DIMENSIONS

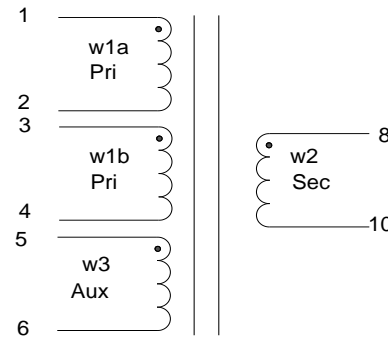


Bottom View



Recommended PCB layout in mounting direction

ELECTRICAL DIAGRAM



Pin 2 and Pin3 connected on PCB

APPLIED STANDARDS

- 1 RoHS and REACH directive
- 2 All materials UL approved

WORKING CONDITIONS

Rated Power	24 Watts
Peak Power	48 Watts
Topology	Flyback
Sw frequency	63kHz
Input voltage (W1)	80-140 Vdc
Output Aux (W3)	0,22 Arms
Output Sec (W2)	14Vdc / 2Adc
Primary Inductance (W1)	262 uH ± 10%
LK Inductance (W1)	5uH max
Turn ratio (W1:W2:W3)	50:14:11
Primary Isat (W1)*	min 4 Amps at 125°C
Insulation (W1+W3)/(W2)	1500 Vac / 1 minute
Estimated total losses	1,5 Watts
Estimated temp rise	<30°C (Natural cooling)
Operating temperature	-40°C to 125°C

*Saturation mean the inductance drop around 30% versus no load

MARKING

Transformer is marked on top

PI-103725-00 EDA
PRAX WW/YY

WW :Week YY:Year

Pin 1 identified with symbol dot on the core

Note:

- 1 Estimated component weight 30g typ.

Edition	Change Description	Changed by	Date
A	First edition. DRAFT	MZ	17-1-25
B			
C			
D			

General dimension tolerance unless otherwise stated: ±0,2	Designed by	Approved by
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MOUNTING DETAILS

2 layers yellow tapes
W3: 11 turns of 20*0,1 Litz nylon wire
2 layers yellow tapes
W1b: 25 turns of 20*0,1 Litz nylon wire
2 layers yellow tapes
W2: 14 turns of 11*0,22 Litzno insulation wire
2 layers yellow tapes
W1a: 25 turns of 20*0,1 Litz nylon wire

↑
Bobbin

PARAMETERS TESTED-Mass production

Parameter	Min	Typ	Max	Unit	Condition
Primary Inductance (W1)	235,8	262	288	uH	50kHz, 250 mVac
Turn ratio (W1,W2,W3)		50:14:11		Turns	50kHz, 250 mVac
LK Inductance W1(Short W2+W3)			5,0	uH	50kHz, 250 mVac
Hi-Pot (W1+W3)/(W2)	1500			Vac	50Hz, 2 seconds, 1,0mA

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