



SPECIFICATION FOR APPROVAL



www.twktec.com

KE-357AJ22ZZ27

OPEN FRAME TRANSFORMER

KE-357AJ22ZZ27

Manufacturer Part No.: KS251478

Customer Name KTEC

Customer Part NO. _____

[illegible]

SALES	QE	APPROVED BY	MADE BY
TAI	徐海鑫	贺洪明	冯朵朵

APPROVED BY	CHECKED BY	TESTED BY

TRANSFORMER

KE-357AJ22ZZ27

Manufacturer Part No.: KS251478



1. ELECTRICAL CHARACTERISTICS	4
1.1 Primary input rating:	4
1.2 Secondary output:	4
1.3 Chemical Substance Control Laws	4
1.4 Primary no-load current (IO):.....	4
1.5 Core loss (CL):.....	4
1.6 DC resistance (DCR), measured at 25°C:	4
1.7 Dielectric strength test (Hi-pot):	4
1.8 Insulation resistance (IR):.....	5
1.9 Induced voltage:	5
1.10 Humidity test :	5
1.11 Temperature rise(ΔT):	5
2. MECHANICAL CHARACTERISTICS:.....	5
2.1 Pull strength test:.....	5
2.2 Appearance:	5
2.3 Dimension:.....	5
3. SAFETY STANDARD:.....	5
4. INSULATION SYSTEM:	5
5. ENVIRONMENTAL CONDITION:	6
6. CORE LAMINATION METHOD:.....	6
7. INSPECTION ON MASS PRODUCTION:.....	6
7.1 The inspection items for 100% of the products:	6
7.2 H-2. Sampling test items:	6
8. APPEARANCE DRAWING: (Unit: mm).....	7
9. TRANSFORMER LABEL.....	8
10. PACKING: (UNIT: MM).....	10
11. MASTER BOX LABEL.....	12

TRANSFORMER

KE-357AJ22ZZ27

Manufacturer Part No.: KS251478



1. ELECTRICAL CHARACTERISTICS

1.1 Primary input rating:

AC 120/220/277 VAC 50/60 Hz

1.2 Secondary output:

WINDING	SECONDARY OUTPUT	
INPUT VOLTAGE	LOADING(VL)	NO LOAD(VO)
120 VAC 60Hz (BLK-WHT)	12V/24V±5% @0.8A	13.2V/26.6V±5%
220 VAC 60Hz (BLK-RED)	12V/24V±5% @0.8A	13.2V/26.6V±5%
277 VAC 60Hz (BLK-BRN)	12V/24V±5% @0.8A	13.2V/26.6V±5%

1.3 Chemical Substance Control Laws

ROHS

1.4 Primary no-load current (IO):

0.3 A rms max, at input 120/220/277 VAC 50/60 Hz.

1.5 Core loss (CL):

5 watts maximum, at input 120/220/277 VAC 60 Hz, no-load

1.6 DC resistance (DCR), measured at 25°C :

BLK-BRN: / Ω maximum; WHT-WHT: / Ω maximum;

YEL-YEL: / Ω maximum;

1.7 Dielectric strength test (Hi-pot):

AC 2500 V for 60 seconds between primary to secondary;

AC 1600 V for 60 seconds between primary to core;

AC 500 V for 60 seconds between secondary to core; and cutoff current 1 Ma max, without breakdown.

At an alternative potentials, increasing 20% of voltage to be applied for one second in mass production.

TRANSFORMER

KE-357AJ22ZZ27

Manufacturer Part No.: KS251478



1.8 Insulation resistance (IR):

By 500 VDC tester, 100 Mohms minimum between primary and secondary.

1.9 Induced voltage:

All secondary open, primary should withstand AC 554 V 400 Hz for 18 seconds without breakdown.

1.10 Humidity test :

The unit shall be stored at a temperature of 40 ± 2 °C and a humidity 90-95%R.H. for 48 hours.

Then stored at a standard atmospheric conditions for 30 minutes for recovery.

The results should meet item B-6 requirements, and its insulation resistance shall be 10 M ohms minimum.

1.11 Temperature rise(ΔT):

95°C max for primary coil ,at 25°C ambient, in open air at 120/220/277 VAC 50/60 Hz input and rated load.

2. MECHANICAL CHARACTERISTICS:

2.1 Pull strength test:

Pin or Lead wires should withstand pull force of 5 lbs for 60 seconds, no damage occurred.

2.2 Appearance:

Damage and rust are not permitted.

2.3 Dimension:

As mechanical drawing.

3. SAFETY STANDARD:

Meet UL/CUL 5085

4. INSULATION SYSTEM:

Class B-TaiHu 130-TM(Table X)

TRANSFORMER

KE-357AJ22ZZ27

Manufacturer Part No.: KS251478



5. ENVIRONMENTAL CONDITION:

Normal operating temperature range: $0^{\circ}\text{C}\sim+40^{\circ}\text{C}$

Normal operating humidity range: $0\sim95\%\text{R.H}$

Storage temperature range: $-20^{\circ}\text{C}\sim+70^{\circ}\text{C}.$

6. CORE LAMINATION METHOD:

Submitted samples: Argon welding or Interleaving

Products of mass production: Argon welding or Interleaving

7. INSPECTION ON MASS PRODUCTION:

7.1 The inspection items for 100% of the products:

- ◆ Primary no-load current (Io)
- ◆ Core loss (CL)
- ◆ Output no-load voltage (VO)
- ◆ Appearance
- ◆ Dielectric strength test (Hi-pot)
- ◆ Mechanical Dimensions

7.2 H-2. Sampling test items:

- ◆ Insulation resistance
- ◆ Induced voltage
- ◆ DC resistance
- ◆ Pull strength test
- ◆ Output load voltage (VL)

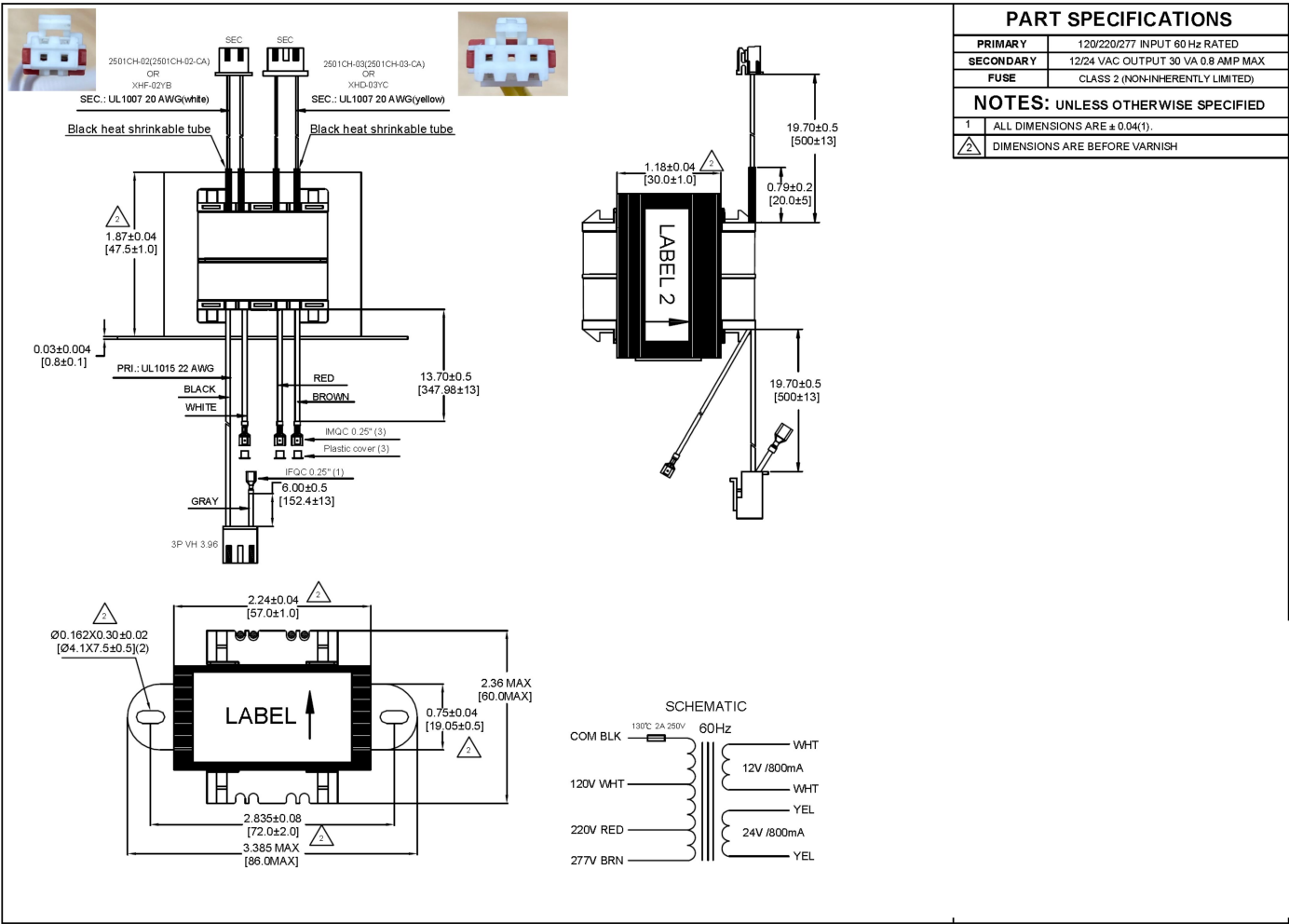
TRANSFORMER

KE-357AJ22ZZ27

Manufacturer Part No.: KS251478



8. APPEARANCE DRAWING: (Unit: mm)



NOTE: 1. ROHS

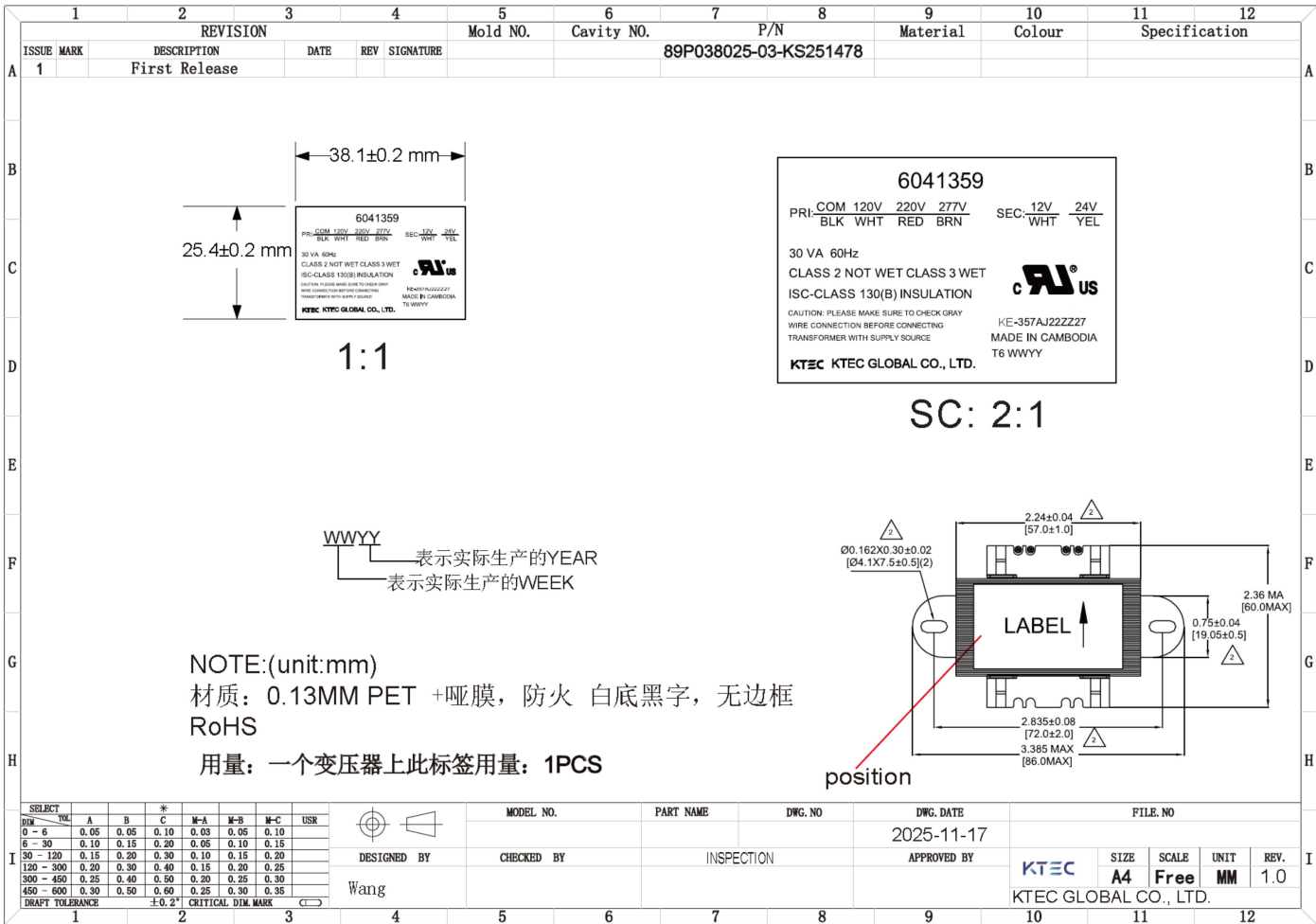
TRANSFORMER



KE-357AJ22ZZ27 Manufacturer Part No.: KS251478

9. TRANSFORMER LABEL

Label 1



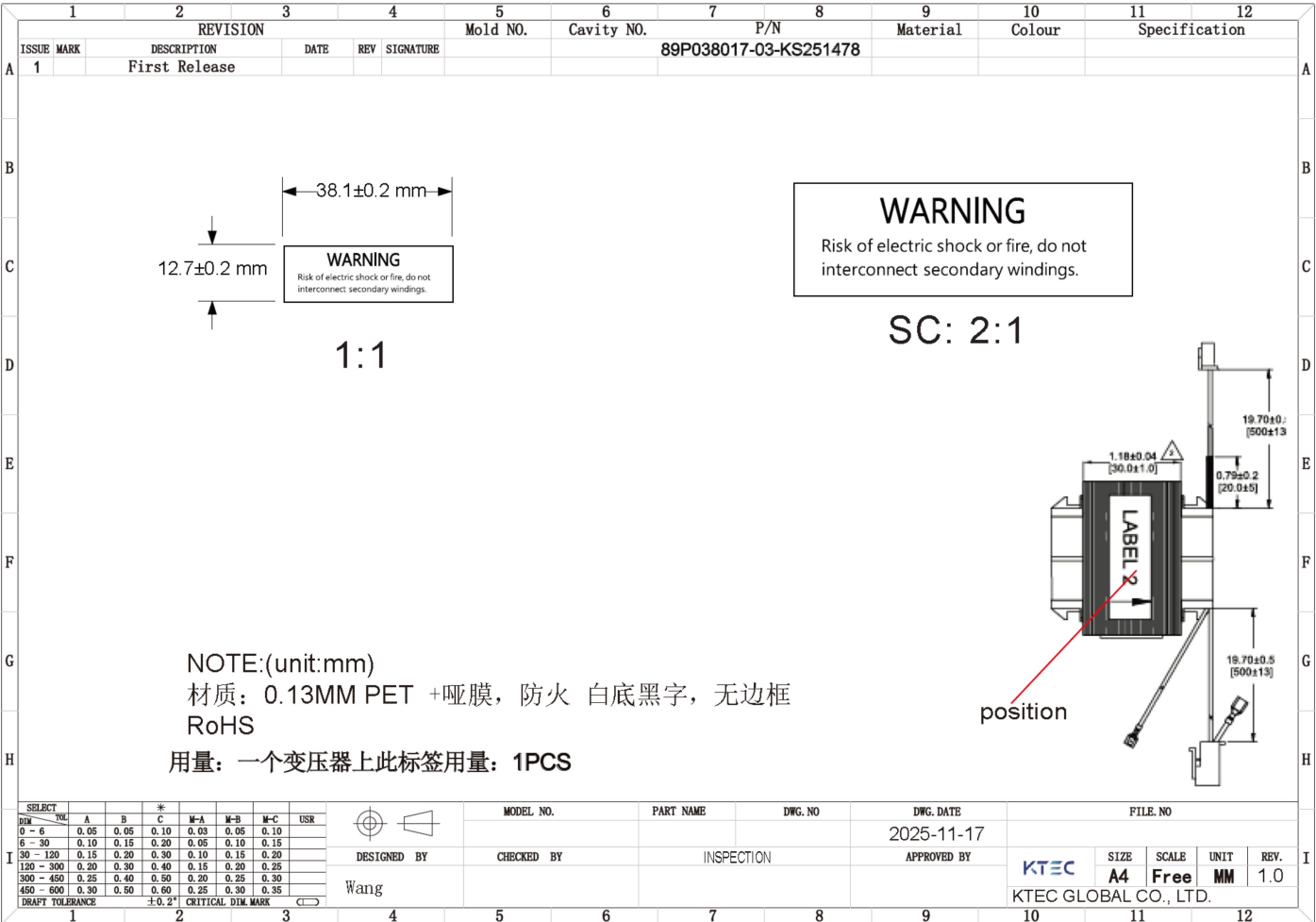
TRANSFORMER

KE-357AJ22ZZ27

Manufacturer Part No.: KS251478



Label 2

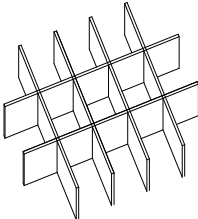
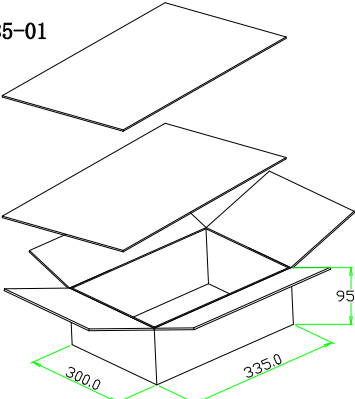


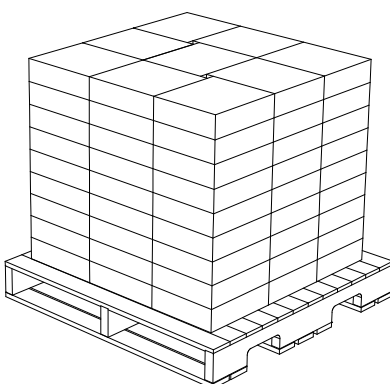
TRANSFORMER

KE-357AJ22ZZ27 Manufacturer Part No.: KS251478



10. PACKING: (UNIT: MM)

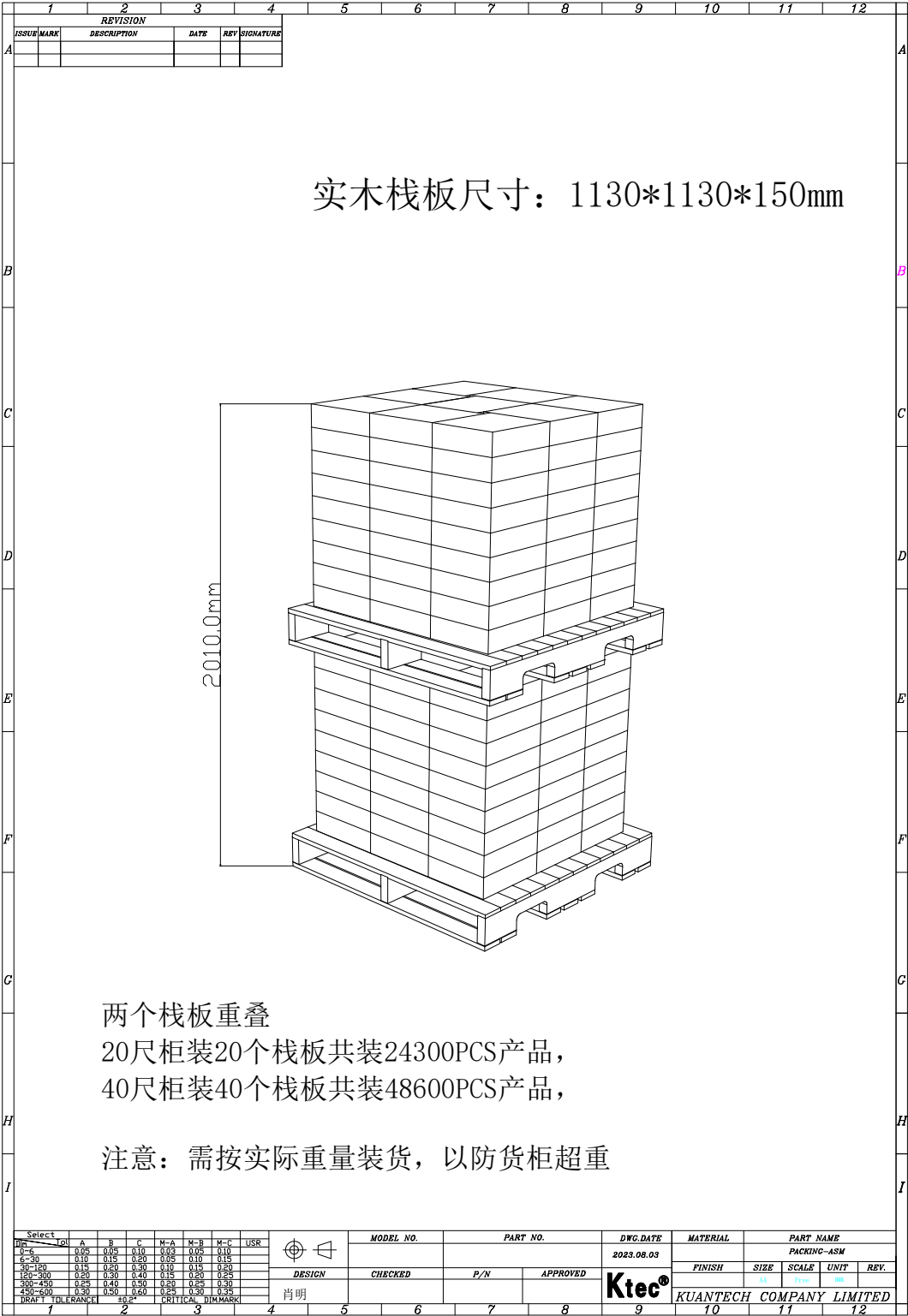
1	2	3	4	5	6	7	8	9	10	11	12																																																																																																																																																																
REVISION				Mold NO.	Cavity NO.	P/N	Material	Colour	Specification																																																																																																																																																																		
ISSUE	MARK	DESCRIPTION	DATE	REV	SIGNATURE																																																																																																																																																																						
A	1	First Release	2021.04.23	1.0	肖明																																																																																																																																																																						
 11Q926070-01 用量: 1 11T320285-01 用量: 2  11P333095-01 用量: 1 每箱装15PCS																																																																																																																																																																											
<table border="1"><thead><tr><th>SELECT</th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th><th>H</th><th>I</th><th>J</th><th>K</th></tr></thead><tbody><tr><td>0-5</td><td>0.05</td><td>0.05</td><td>0.10</td><td>0.05</td><td>0.05</td><td>0.10</td><td>0.05</td><td>0.10</td><td>0.05</td><td>0.10</td><td>0.05</td></tr><tr><td>6-10</td><td>0.10</td><td>0.10</td><td>0.20</td><td>0.10</td><td>0.10</td><td>0.20</td><td>0.10</td><td>0.20</td><td>0.10</td><td>0.20</td><td>0.10</td></tr><tr><td>11-15</td><td>0.15</td><td>0.15</td><td>0.30</td><td>0.15</td><td>0.15</td><td>0.30</td><td>0.15</td><td>0.30</td><td>0.15</td><td>0.30</td><td>0.15</td></tr><tr><td>16-20</td><td>0.20</td><td>0.20</td><td>0.40</td><td>0.20</td><td>0.20</td><td>0.40</td><td>0.20</td><td>0.40</td><td>0.20</td><td>0.40</td><td>0.20</td></tr><tr><td>21-25</td><td>0.25</td><td>0.25</td><td>0.50</td><td>0.25</td><td>0.25</td><td>0.50</td><td>0.25</td><td>0.50</td><td>0.25</td><td>0.50</td><td>0.25</td></tr><tr><td>26-30</td><td>0.30</td><td>0.30</td><td>0.60</td><td>0.30</td><td>0.30</td><td>0.60</td><td>0.30</td><td>0.60</td><td>0.30</td><td>0.60</td><td>0.30</td></tr><tr><td>31-35</td><td>0.35</td><td>0.35</td><td>0.70</td><td>0.35</td><td>0.35</td><td>0.70</td><td>0.35</td><td>0.70</td><td>0.35</td><td>0.70</td><td>0.35</td></tr><tr><td>36-40</td><td>0.40</td><td>0.40</td><td>0.80</td><td>0.40</td><td>0.40</td><td>0.80</td><td>0.40</td><td>0.80</td><td>0.40</td><td>0.80</td><td>0.40</td></tr><tr><td>41-45</td><td>0.45</td><td>0.45</td><td>0.90</td><td>0.45</td><td>0.45</td><td>0.90</td><td>0.45</td><td>0.90</td><td>0.45</td><td>0.90</td><td>0.45</td></tr><tr><td>46-50</td><td>0.50</td><td>0.50</td><td>1.00</td><td>0.50</td><td>0.50</td><td>1.00</td><td>0.50</td><td>1.00</td><td>0.50</td><td>1.00</td><td>0.50</td></tr><tr><td colspan="12">DRAFT TOLERANCE ±0.2 CRITICAL DIM. MARK</td></tr></tbody></table>  DESIGNED BY: ?? <table border="1"><thead><tr><th>MODEL NO.</th><th>PART NAME</th><th>DWG. NO.</th><th>DWG. DATE</th><th>FILE NO.</th></tr></thead><tbody><tr><td>-</td><td>-</td><td>-</td><td>2023.08.02</td><td>-</td></tr></tbody></table>  CHECKED BY: ?? <table border="1"><thead><tr><th>MANAGER</th><th>SAFETY INSPECTION</th><th>APPROVED BY</th></tr></thead><tbody><tr><td>-</td><td>-</td><td>-</td></tr></tbody></table>  SIZE: A4 SCALE: Free UNIT: MM REV: 1.0 KUANTECH CORPORATION LIMITED												SELECT	A	B	C	D	E	F	G	H	I	J	K	0-5	0.05	0.05	0.10	0.05	0.05	0.10	0.05	0.10	0.05	0.10	0.05	6-10	0.10	0.10	0.20	0.10	0.10	0.20	0.10	0.20	0.10	0.20	0.10	11-15	0.15	0.15	0.30	0.15	0.15	0.30	0.15	0.30	0.15	0.30	0.15	16-20	0.20	0.20	0.40	0.20	0.20	0.40	0.20	0.40	0.20	0.40	0.20	21-25	0.25	0.25	0.50	0.25	0.25	0.50	0.25	0.50	0.25	0.50	0.25	26-30	0.30	0.30	0.60	0.30	0.30	0.60	0.30	0.60	0.30	0.60	0.30	31-35	0.35	0.35	0.70	0.35	0.35	0.70	0.35	0.70	0.35	0.70	0.35	36-40	0.40	0.40	0.80	0.40	0.40	0.80	0.40	0.80	0.40	0.80	0.40	41-45	0.45	0.45	0.90	0.45	0.45	0.90	0.45	0.90	0.45	0.90	0.45	46-50	0.50	0.50	1.00	0.50	0.50	1.00	0.50	1.00	0.50	1.00	0.50	DRAFT TOLERANCE ±0.2 CRITICAL DIM. MARK												MODEL NO.	PART NAME	DWG. NO.	DWG. DATE	FILE NO.	-	-	-	2023.08.02	-	MANAGER	SAFETY INSPECTION	APPROVED BY	-	-	-
SELECT	A	B	C	D	E	F	G	H	I	J	K																																																																																																																																																																
0-5	0.05	0.05	0.10	0.05	0.05	0.10	0.05	0.10	0.05	0.10	0.05																																																																																																																																																																
6-10	0.10	0.10	0.20	0.10	0.10	0.20	0.10	0.20	0.10	0.20	0.10																																																																																																																																																																
11-15	0.15	0.15	0.30	0.15	0.15	0.30	0.15	0.30	0.15	0.30	0.15																																																																																																																																																																
16-20	0.20	0.20	0.40	0.20	0.20	0.40	0.20	0.40	0.20	0.40	0.20																																																																																																																																																																
21-25	0.25	0.25	0.50	0.25	0.25	0.50	0.25	0.50	0.25	0.50	0.25																																																																																																																																																																
26-30	0.30	0.30	0.60	0.30	0.30	0.60	0.30	0.60	0.30	0.60	0.30																																																																																																																																																																
31-35	0.35	0.35	0.70	0.35	0.35	0.70	0.35	0.70	0.35	0.70	0.35																																																																																																																																																																
36-40	0.40	0.40	0.80	0.40	0.40	0.80	0.40	0.80	0.40	0.80	0.40																																																																																																																																																																
41-45	0.45	0.45	0.90	0.45	0.45	0.90	0.45	0.90	0.45	0.90	0.45																																																																																																																																																																
46-50	0.50	0.50	1.00	0.50	0.50	1.00	0.50	1.00	0.50	1.00	0.50																																																																																																																																																																
DRAFT TOLERANCE ±0.2 CRITICAL DIM. MARK																																																																																																																																																																											
MODEL NO.	PART NAME	DWG. NO.	DWG. DATE	FILE NO.																																																																																																																																																																							
-	-	-	2023.08.02	-																																																																																																																																																																							
MANAGER	SAFETY INSPECTION	APPROVED BY																																																																																																																																																																									
-	-	-																																																																																																																																																																									

1	2	3	4	5	6	7	8	9	10	11	12																																																																																																																																																																
REVISION				Mold NO.	Cavity NO.	P/N	Material	Colour	Specification																																																																																																																																																																		
ISSUE	MARK	DESCRIPTION	DATE	REV	SIGNATURE																																																																																																																																																																						
A	1	First Release	2023.08.02	1.0	肖明																																																																																																																																																																						
实木栈板尺寸: 1130*1130*150mm  每箱装15PCS 一个栈板装81箱, 共1215PCS																																																																																																																																																																											
<table border="1"><thead><tr><th>SELECT</th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th><th>H</th><th>I</th><th>J</th><th>K</th></tr></thead><tbody><tr><td>0-5</td><td>0.05</td><td>0.05</td><td>0.10</td><td>0.05</td><td>0.05</td><td>0.10</td><td>0.05</td><td>0.10</td><td>0.05</td><td>0.10</td><td>0.05</td></tr><tr><td>6-10</td><td>0.10</td><td>0.10</td><td>0.20</td><td>0.10</td><td>0.10</td><td>0.20</td><td>0.10</td><td>0.20</td><td>0.10</td><td>0.20</td><td>0.10</td></tr><tr><td>11-15</td><td>0.15</td><td>0.15</td><td>0.30</td><td>0.15</td><td>0.15</td><td>0.30</td><td>0.15</td><td>0.30</td><td>0.15</td><td>0.30</td><td>0.15</td></tr><tr><td>16-20</td><td>0.20</td><td>0.20</td><td>0.40</td><td>0.20</td><td>0.20</td><td>0.40</td><td>0.20</td><td>0.40</td><td>0.20</td><td>0.40</td><td>0.20</td></tr><tr><td>21-25</td><td>0.25</td><td>0.25</td><td>0.50</td><td>0.25</td><td>0.25</td><td>0.50</td><td>0.25</td><td>0.50</td><td>0.25</td><td>0.50</td><td>0.25</td></tr><tr><td>26-30</td><td>0.30</td><td>0.30</td><td>0.60</td><td>0.30</td><td>0.30</td><td>0.60</td><td>0.30</td><td>0.60</td><td>0.30</td><td>0.60</td><td>0.30</td></tr><tr><td>31-35</td><td>0.35</td><td>0.35</td><td>0.70</td><td>0.35</td><td>0.35</td><td>0.70</td><td>0.35</td><td>0.70</td><td>0.35</td><td>0.70</td><td>0.35</td></tr><tr><td>36-40</td><td>0.40</td><td>0.40</td><td>0.80</td><td>0.40</td><td>0.40</td><td>0.80</td><td>0.40</td><td>0.80</td><td>0.40</td><td>0.80</td><td>0.40</td></tr><tr><td>41-45</td><td>0.45</td><td>0.45</td><td>0.90</td><td>0.45</td><td>0.45</td><td>0.90</td><td>0.45</td><td>0.90</td><td>0.45</td><td>0.90</td><td>0.45</td></tr><tr><td>46-50</td><td>0.50</td><td>0.50</td><td>1.00</td><td>0.50</td><td>0.50</td><td>1.00</td><td>0.50</td><td>1.00</td><td>0.50</td><td>1.00</td><td>0.50</td></tr><tr><td colspan="12">DRAFT TOLERANCE ±0.2 CRITICAL DIM. MARK</td></tr></tbody></table>  DESIGNED BY: ?? <table border="1"><thead><tr><th>MODEL NO.</th><th>PART NAME</th><th>DWG. NO.</th><th>DWG. DATE</th><th>FILE NO.</th></tr></thead><tbody><tr><td>-</td><td>-</td><td>-</td><td>2023.08.02</td><td>-</td></tr></tbody></table>  CHECKED BY: ?? <table border="1"><thead><tr><th>MANAGER</th><th>SAFETY INSPECTION</th><th>APPROVED BY</th></tr></thead><tbody><tr><td>-</td><td>-</td><td>-</td></tr></tbody></table>  SIZE: A4 SCALE: Free UNIT: MM REV: 1.0 KUANTECH CORPORATION LIMITED												SELECT	A	B	C	D	E	F	G	H	I	J	K	0-5	0.05	0.05	0.10	0.05	0.05	0.10	0.05	0.10	0.05	0.10	0.05	6-10	0.10	0.10	0.20	0.10	0.10	0.20	0.10	0.20	0.10	0.20	0.10	11-15	0.15	0.15	0.30	0.15	0.15	0.30	0.15	0.30	0.15	0.30	0.15	16-20	0.20	0.20	0.40	0.20	0.20	0.40	0.20	0.40	0.20	0.40	0.20	21-25	0.25	0.25	0.50	0.25	0.25	0.50	0.25	0.50	0.25	0.50	0.25	26-30	0.30	0.30	0.60	0.30	0.30	0.60	0.30	0.60	0.30	0.60	0.30	31-35	0.35	0.35	0.70	0.35	0.35	0.70	0.35	0.70	0.35	0.70	0.35	36-40	0.40	0.40	0.80	0.40	0.40	0.80	0.40	0.80	0.40	0.80	0.40	41-45	0.45	0.45	0.90	0.45	0.45	0.90	0.45	0.90	0.45	0.90	0.45	46-50	0.50	0.50	1.00	0.50	0.50	1.00	0.50	1.00	0.50	1.00	0.50	DRAFT TOLERANCE ±0.2 CRITICAL DIM. MARK												MODEL NO.	PART NAME	DWG. NO.	DWG. DATE	FILE NO.	-	-	-	2023.08.02	-	MANAGER	SAFETY INSPECTION	APPROVED BY	-	-	-
SELECT	A	B	C	D	E	F	G	H	I	J	K																																																																																																																																																																
0-5	0.05	0.05	0.10	0.05	0.05	0.10	0.05	0.10	0.05	0.10	0.05																																																																																																																																																																
6-10	0.10	0.10	0.20	0.10	0.10	0.20	0.10	0.20	0.10	0.20	0.10																																																																																																																																																																
11-15	0.15	0.15	0.30	0.15	0.15	0.30	0.15	0.30	0.15	0.30	0.15																																																																																																																																																																
16-20	0.20	0.20	0.40	0.20	0.20	0.40	0.20	0.40	0.20	0.40	0.20																																																																																																																																																																
21-25	0.25	0.25	0.50	0.25	0.25	0.50	0.25	0.50	0.25	0.50	0.25																																																																																																																																																																
26-30	0.30	0.30	0.60	0.30	0.30	0.60	0.30	0.60	0.30	0.60	0.30																																																																																																																																																																
31-35	0.35	0.35	0.70	0.35	0.35	0.70	0.35	0.70	0.35	0.70	0.35																																																																																																																																																																
36-40	0.40	0.40	0.80	0.40	0.40	0.80	0.40	0.80	0.40	0.80	0.40																																																																																																																																																																
41-45	0.45	0.45	0.90	0.45	0.45	0.90	0.45	0.90	0.45	0.90	0.45																																																																																																																																																																
46-50	0.50	0.50	1.00	0.50	0.50	1.00	0.50	1.00	0.50	1.00	0.50																																																																																																																																																																
DRAFT TOLERANCE ±0.2 CRITICAL DIM. MARK																																																																																																																																																																											
MODEL NO.	PART NAME	DWG. NO.	DWG. DATE	FILE NO.																																																																																																																																																																							
-	-	-	2023.08.02	-																																																																																																																																																																							
MANAGER	SAFETY INSPECTION	APPROVED BY																																																																																																																																																																									
-	-	-																																																																																																																																																																									

TRANSFORMER

KE-357AJ22ZZ27

Manufacturer Part No.: KS251478



TRANSFORMER

KE-357AJ22ZZ27

Manufacturer Part No.: KS251478



11. MASTER BOX LABEL

1	2	3	4	5	6	7	8	9	10	11	12			
ISSUE MARK		REVISION		Mold NO.		Cavity NO.		P/N		Material		Colour	Specification	
1		First Release						01P101050-03-KS251478						

MASTER BOX LABEL

101.6±0.2 mm

6041359
QTY-XX
KE-357AJ22ZZ27
KTEC
KTEC GLOBAL CO., LTD.

50.8±0.2 mm

实际装箱数量

1:1

Note (unit:mm):

1. 材質：铜板纸(背面背胶) T=0.11±0.01mm.

2. 印刷：白底黑字(无边框). 字体：Arial

3. 条码类型：Code 128

4. RoHS compliant indication.

来料必须做粘性高低温测试，测试条件：高温40度，低温-5度 4小时，
不会产生气泡或翘起，印刷必须清晰不得有断线，模糊不清等不良现象

(外箱侧唛右上角位置):
粘贴位置如图所示

SELECT	A	B	C	M-A	M-B	M-C	USK	MODEL NO.	PART NAME	DWG. NO	DWG. DATE	FILE NO	
0 - 6	0.05	0.05	0.10	0.03	0.05	0.10					2025-11-17		
6 - 30	0.10	0.15	0.20	0.05	0.10	0.15							
30 - 120	0.15	0.20	0.30	0.10	0.15	0.20							
120 - 300	0.20	0.30	0.40	0.15	0.20	0.25							
300 - 450	0.25	0.40	0.50	0.20	0.25	0.30							
450 - 600	0.30	0.50	0.60	0.25	0.30	0.35							
DRAFT TOLERANCE								±0.2* CRITICAL DIM. MARK					

DESIGNED BY
Wang

CHECKED BY

INSPECTION

APPROVED BY

KTEC

SIZE
A4

SCALE
Free

UNIT
MM

REV.
1.0

KTEC GLOBAL CO., LTD.