

High Current Ferrite Bead

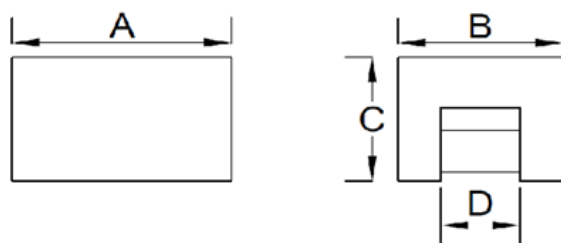
BPH322521W5-350T

1. Features

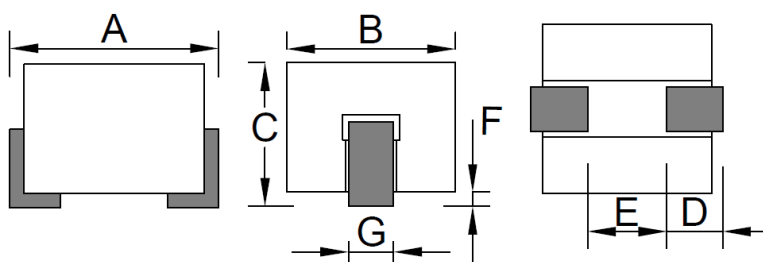
- 100% Lead(Pb) & Halogen-Free and RoHS compliant.
- Operating temperature -40~+125°C (Including self - temperature rise)



2. Dimension

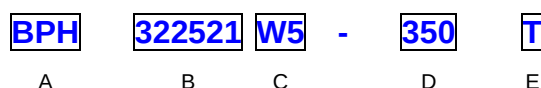


CORE SIZE			
A(mm)	B(mm)	C(mm)	D(mm)
3.10±0.15	2.50±0.15	2.10±0.15	0.90±0.15



PRODUCT SIZE						
A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)
3.10±0.15	2.50±0.15	2.15±0.15	0.85±0.20	1.20±0.20	0.00~0.10	0.70±0.10

3. Part Numbering



- A: Series
 B: Dimension
 C: Material
 D: Impedance
 E: Packaging
- Ferrite Core
 350=35Ω
 T=Taping and Reel

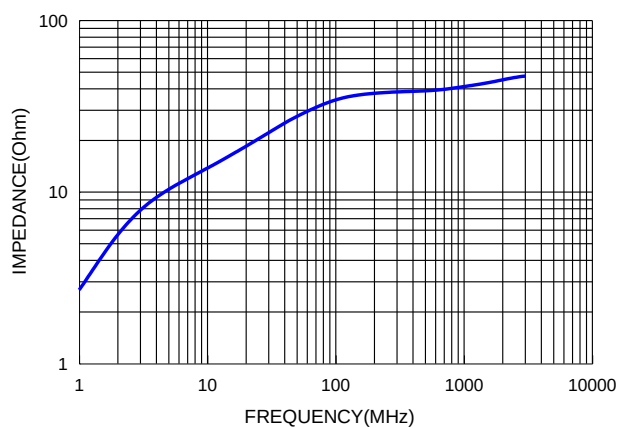
4. Specification

TAI-TECH Part Number	ELECTRICAL REQUIREMENTS 1			ELECTRICAL REQUIREMENTS 2			DCR (mΩ) Max.	Rated Current(A) ΔT=40°C TYP.
	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)		
BPH322521W5-350T	25	±25	25	35	±25	100	0.60	21.0

Note:

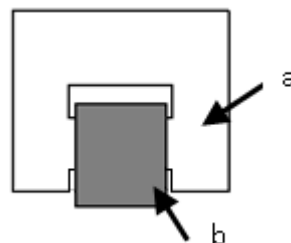
- Rated Current :
(1) : Chroma high current test fixture.
- All test data referenced to 25°C ambient.

Typical Impedance v.s. Frequency Curve

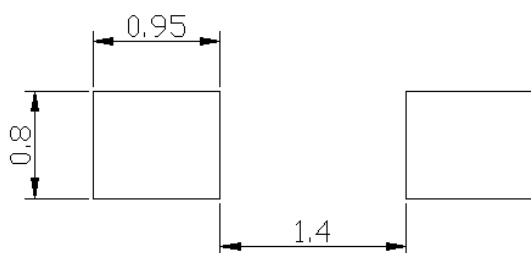


5. Material List

No.	Description	Specification
a.	Core	Ferrite Core
b.	Wire	Electroplated nickel-tin flat copper wire



6. Recommended PC Board Pattern



High Current Ferrite Bead

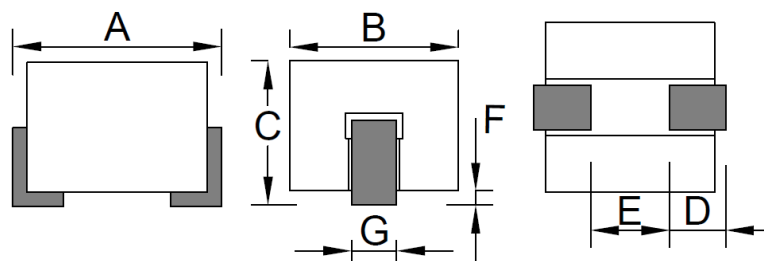
BPH323023W5-400T

1. Features

- 100% Lead(Pb) & Halogen-Free and RoHS compliant.
- Operating temperature -40~+125°C (Including self - temperature rise)



2. Dimension



PRODUCT SIZE						
A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)
3.08 +0.10/-0.15	2.90±0.10	2.20±0.10	0.80±0.20	1.20 Min.	0.00~0.11	0.85±0.10

3. Part Numbering

BPH
323023
W5
-
400
T

A: Series
 B: Dimension
 C: Material Ferrite Core
 D: Impedance 400=40Ω
 E: Packaging T=Taping and Reel

4. Specification

TAI-TECH Part Number	ELECTRICAL REQUIREMENTS 1			ELECTRICAL REQUIREMENTS 2			DCR (mΩ) Max.	Rated Current(A)	
	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)		△T=40°C TYP.	△T=60°C TYP.
BPH323023W5-400T	23	±25	25	40	±25	100	0.60	21.0(1) 15.0(2)	26.0(1) 18.0(2)

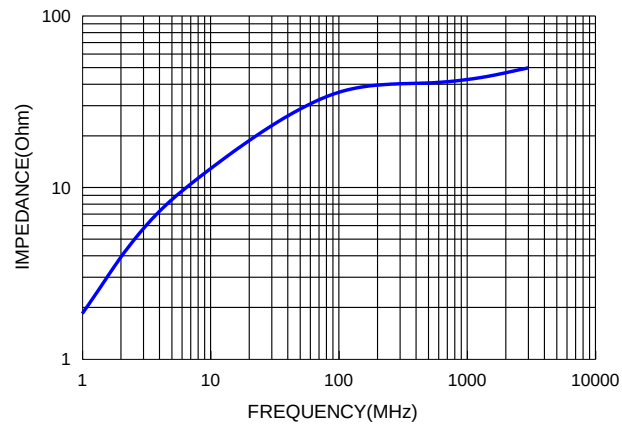
Note:

Rated Current :

(1) : Chroma high current test fixture.

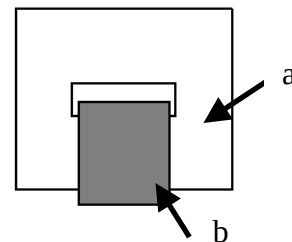
(2) :PCB test fixture (30x45mm copper pattern , 50um copper thickness).

Typical Impedance v.s. Frequency Curve

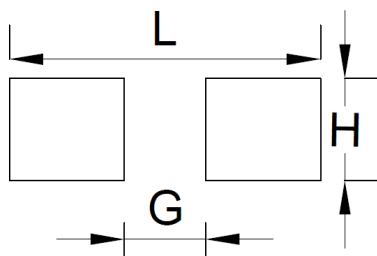


5. Material List

No.	Description	Specification
a.	Core	Ferrite Core
b.	Wire	Electroplated nickel-tin flat copper wire (0.8W X 0.25T)mm



6. Recommended PC Board Pattern



L(mm)	G(mm)	H(mm)
3.70	1.10	1.10

High Current Ferrite Bead

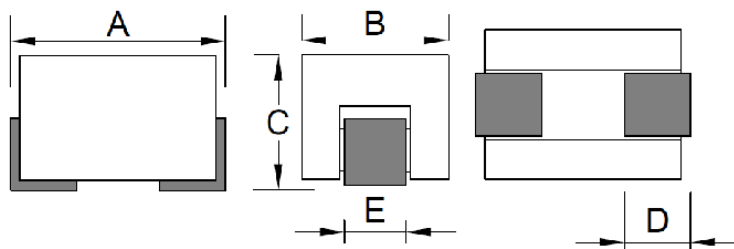
BPH403022R5-400T-G

1. Features

- 100% Lead(Pb) & Halogen-Free and RoHS compliant.
- Operating temperature -40~+125°C (Including self - temperature rise)



2. Dimension



PRODUCT SIZE				
A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
3.90~4.50	3.00±0.15	2.20 Max	1.00±0.20	1.25±0.15

3. Part Numbering

BPH
403022
R5
-
400
T
-
G

A: Series
 B: Dimension
 C: Material Ferrite Core
 D: Impedance 400=40Ω
 E: Packaging T=Taping and Reel
 F: Control S/N

4. Specification

TAI-TECH Part Number	ELECTRICAL REQUIREMENTS 1			ELECTRICAL REQUIREMENTS 2			DCR (mΩ) Max.	Rated Current(A)	
	Impedance (Ω)	Tolerance (%)	Test Frequency (Hz)	Impedance (Ω)	Tolerance (%)	Test Frequency (Hz)		△T=40°C TYP.	△T=60°C TYP.
BPH403022R5-400T-G	24	±25	25M	40	±25	100M	0.7	20.0	28.0

Note:

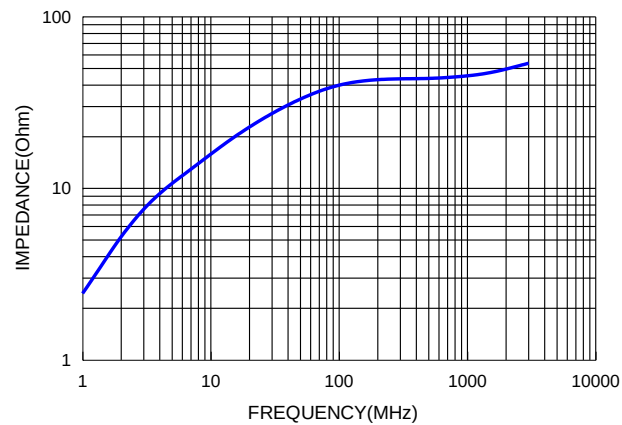
Rated Current :

(1) : Chroma high current test fixture.

(2) : DCR is measured on a micro-ohmmeter at points indicat in the diagram.

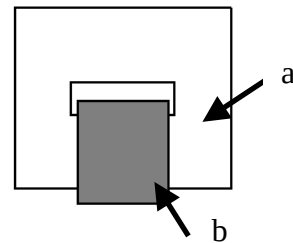


Typical Impedance v.s. Frequency Curve

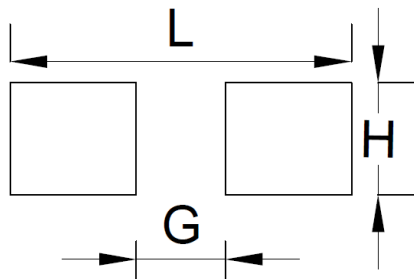


5. Material List

No.	Description	Specification
a.	Core	Ferrite Core
b.	Wire	Electroplated nickel-tin flat copper wire (1.25W X 0.21T)m/m



6. Recommended PC Board Pattern



L(mm)	G(mm)	H(mm)
4.8	2.0	1.5

High Current Ferrite Bead

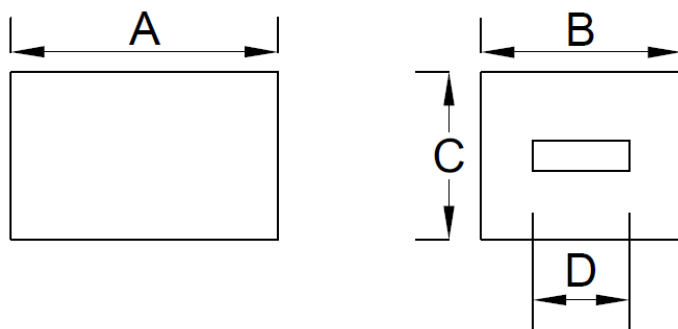
BPH403025R5-530T

1. Features

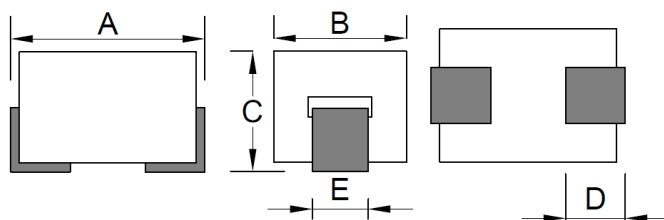
- 100% Lead(Pb) & Halogen-Free and RoHS compliant.
- Operating temperature-40~+125°C (Including self - temperature rise)



2. Dimension



CORE SIZE			
A(mm)	B(mm)	C(mm)	D(mm)
4.00±0.25	3.10±0.15	2.50±0.15	1.50±0.15



PRODUCT SIZE				
A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
4.30~5.10	3.10±0.15	2.70~3.1	1.35±0.20	1.35±0.15

3. Part Numbering

BPH
403025
R5
-
530
T

A: Series
 B: Dimension
 C: Material
 D: Impedance
 E: Packaging

Ferrite Core
 530=53Ω
 T=Taping and Reel

4. Specification

TAI-TECH Part Number	ELECTRICAL REQUIREMENTS 1			ELECTRICAL REQUIREMENTS 2			DCR (mΩ) Max.	Rated Current(A)	
	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)		△T=40°C TYP.	△T=60°C TYP.
BPH403025R5-530T	35	±25	25	53	±25	100	0.60	35.0(1) 15.0(2)	45.0(1) 18.0(2)

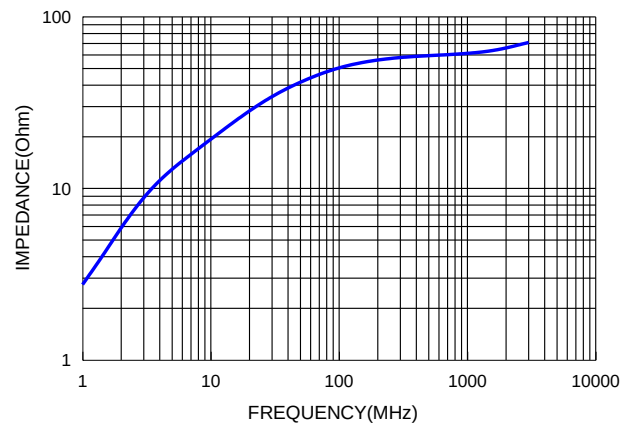
Note:

Rated Current :

(1) : Chroma high current test fixture.

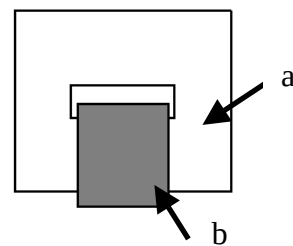
(2) :PCB test fixture (30x45mm copper pattern , 50um copper thickness).

Typical Impedance v.s. Frequency Curve

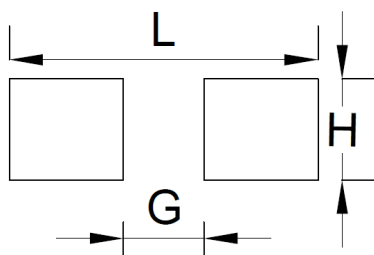


5. Material List

No.	Description	Specification
a.	Core	Ferrite Core
b.	Wire	Electroplated nickel-tin flat copper wire (1.25W X 0.21T)m/m



6. Recommended PC Board Pattern



L(mm)	G(mm)	H(mm)
4.8	1.4	1.5

High Current Ferrite Bead

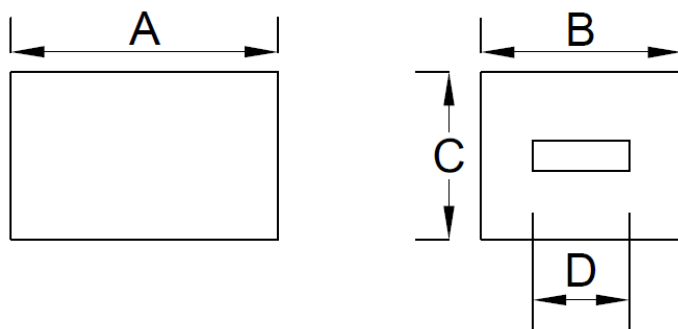
BPH403025MN5-470TP

1. Features

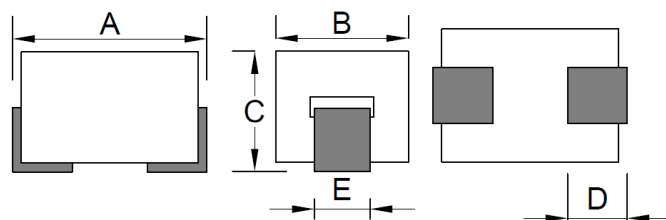
- 100% Lead(Pb) & Halogen-Free and RoHS compliant.
- Operating temperature -40~+125°C (Including self - temperature rise)



2. Dimension



CORE SIZE			
A(mm)	B(mm)	C(mm)	D(mm)
4.00±0.25	3.10±0.15	2.50±0.15	1.50±0.15



PRODUCT SIZE				
A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
4.30~5.10	3.10±0.15	2.70~3.10	1.35±0.20	1.35±0.15

3. Part Numbering

BPH **403025** **MN5** - **470** **T** **P**
 A B C D E F

A: Series

B: Dimension

C: Material

MnZn Core

D: Impedance

470=47Ω

E: Packaging

T=Taping and Reel

F: Surface coating

Parylene coating

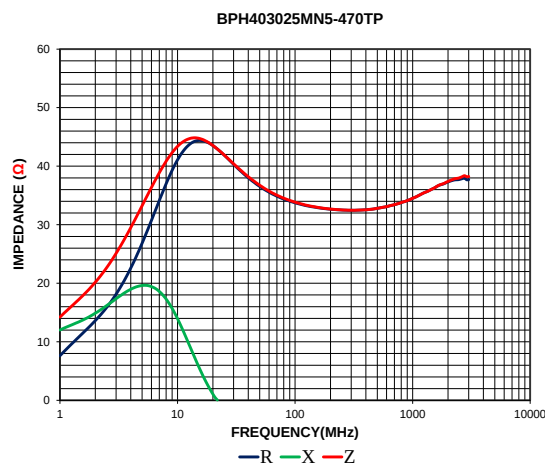
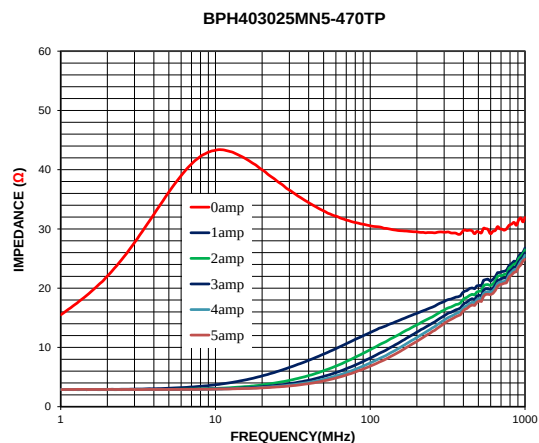
4. Specification

TAI-TECH Part Number	ELECTRICAL REQUIREMENTS 1			ELECTRICAL REQUIREMENTS 2			DCR (mΩ) Max.	Rated Current(A)	
	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)		ΔT=40°C TYP.	ΔT=60°C TYP.
BPH403025MN5-470TP	20	±25	1	47	±25	10	0.75	24.0(1) 10.0(2)	28.0(1) 13.0(2)

Note:

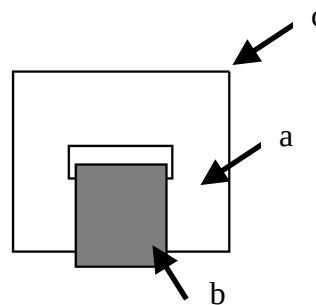
- Rated Current :
 - Chroma high current test fixture.
 - PCB test fixture (30x45mm copper pattern, 50um copper thickness).
- All test data referenced to 25°C ambient.

Typical Impedance v.s. Frequency Curve

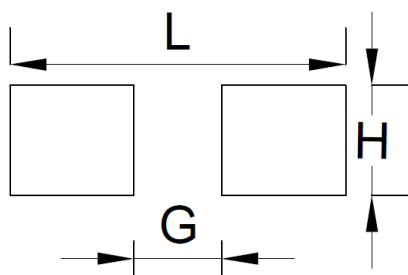


5. Material List

No.	Description	Specification
a.	Core	MnZn Ferrite Core
b.	Wire	Electroplated nickel-tin flat copper wire (1.25W X 0.21T)m/m
c.	Surface coating	Parylene coating



6. Recommended PC Board Pattern



L(mm)	G(mm)	H(mm)
4.8	1.4	1.5

High Current Ferrite Bead

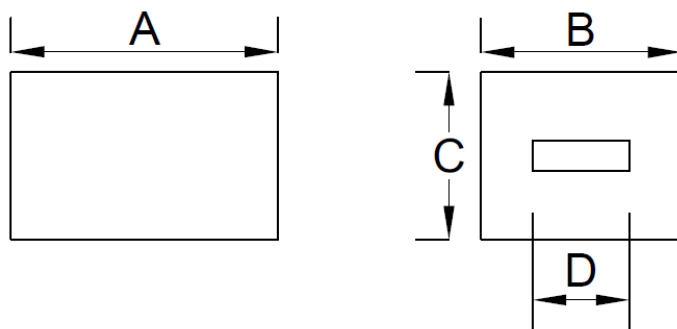
BPH853025R5-101T

1. Features

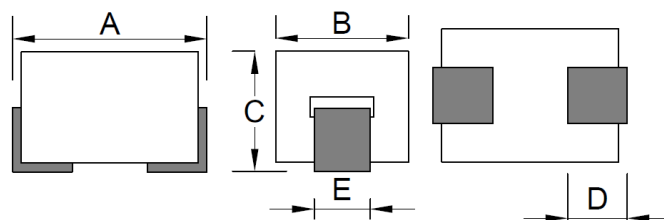
- 100% Lead(Pb) & Halogen-Free and RoHS compliant.
- Operating temperature -40~+125°C (Including self - temperature rise)



2. Dimension



CORE SIZE			
A(mm)	B(mm)	C(mm)	D(mm)
8.50±0.25	3.00±0.15	2.50±0.15	1.50±0.15



PRODUCT SIZE				
A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
9.00±0.40	3.00±0.15	2.80±0.25	1.50±0.50	1.25±0.20

3. Part Numbering

BPH
853025
R5
-
101
T

A: Series

B: Dimension

C: Material

D: Impedance

E: Packaging

Ferrite Core

101=100Ω

T=Taping and Reel

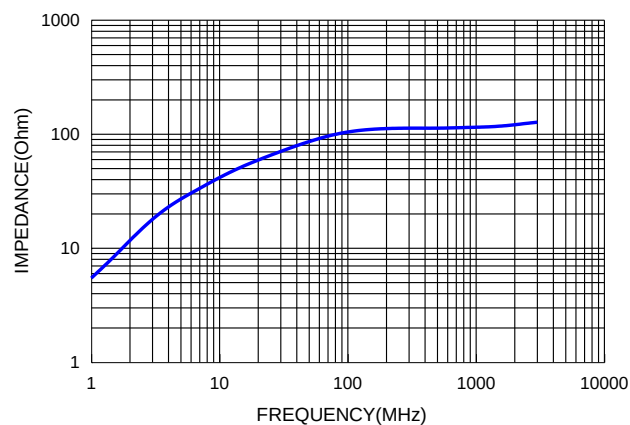
4. Specification

TAI-TECH Part Number	ELECTRICAL REQUIREMENTS 1			ELECTRICAL REQUIREMENTS 2			DCR (mΩ) Max.	Rated Current(A)	
	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)	Impedance (Ω)	Tolerance (%)	Test Frequency (MHz)		ΔT=40°C TYP.	ΔT=60°C TYP.
BPH853025R5-101T	65	±25	25	100	±25	100	1.00	30(1) 13(2)	40(1) 18(2)

Note:

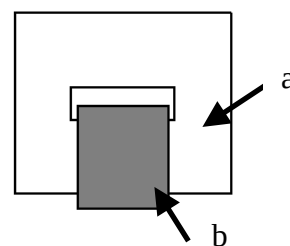
- Rated Current :
 - Chroma high current test fixture.
 - PCB test fixture (30x45mm copper pattern, 50um copper thickness).
- All test data referenced to 25°C ambient.

Typical Impedance v.s. Frequency Curve

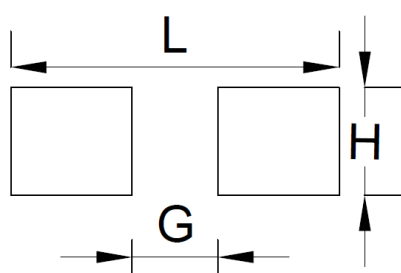


5. Material List

No.	Description	Specification
a.	Core	Ferrite Core
b.	Wire	Electroplated nickel-tin flat copper wire (1.25W X 0.21T)m/m



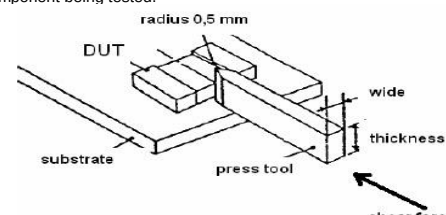
6. Recommended PC Board Pattern



L(mm)	G(mm)	H(mm)
10.7	4.5	1.5

7. Reliability and Test Condition

Item	Performance	Test Condition
Operating temperature	-40~+125℃ (Including self - temperature rise)	
Storage temperature	-40~+125℃ (on board)	
Electrical Performance Test		
Impedance	Refer to standard electrical characteristics list.	Keysight E4991B + Keysight 16092A
DCR		Agilent-34420A
Heat Rated Current (Irms)	Approximately $\Delta T \leq 40^\circ\text{C}$	Heat Rated Current (Irms) will cause the coil temperature rise $\Delta T(^{\circ}\text{C})$ without core loss. 1.Applied the allowed DC current(keep 1 min.). 2.Temperature measured by digital surface thermometer
Reliability Test		
Life Test	Appearance : No damage. Impedance : within $\pm 15\%$ of initial value DCR : within $\pm 15\%$ of initial value and shall not exceed the specification value	Preconditioning: Run through reflow for 3 times. (IPC/JEDECJ-STD-020F Classification Reflow Profiles) Temperature : $125 \pm 2^\circ\text{C}$ (Inductor) Applied current : rated current Duration : 1000 ± 12 hrs Measured at room temperature after placing for 24 hrs.
Load Humidity		Preconditioning: Run through reflow for 3 times. (IPC/JEDECJ-STD-020F Classification Reflow Profiles) Humidity : $85 \pm 3\%$ R.H Temperature : $85^\circ\text{C} \pm 2^\circ\text{C}$ Duration : 1000hrs Min. Bead : with 100% rated current Inductance : with 10% rated current Measured at room temperature after placing for 24 hrs.
Moisture Resistance		Preconditioning: Run through reflow for 3 times. (IPC/JEDEC J-STD-020F Classification Reflow Profiles) 1. Baked at 50°C for 25hrs, measured at room temperature after placing for 4 hrs. 2. Raise temperature to $65 \pm 2^\circ\text{C}$ 90-100%RH in 2.5hrs, and keep 3 hours, cool down to 25°C in 2.5hrs. 3. Raise temperature to $65 \pm 2^\circ\text{C}$ 90-100%RH in 2.5hrs, and keep 3 hours, cool down to 25°C in 2.5hrs, keep at 25°C for 2hrs then keep at -10°C for 3hrs. 4. Keep at 25°C 80-100%RH for 15min and vibrate at the frequency of 10 to 55 Hz to 10 Hz, measured at room temperature after placing for 1~2 hrs.
Thermal Shock		Preconditioning: Run through reflow for 3 times. (IPC/JEDEC J-STD-020F Classification Reflow Profiles) Condition for 1 cycle Step1 : $-40 \pm 2^\circ\text{C}$ 30 ± 5 min Step2 : $125 \pm 2^\circ\text{C}$ ≤ 0.5 min Step3 : $125 \pm 2^\circ\text{C}$ 30 ± 5 min Number of cycles : 500 Measured at room temperature after placing for 24 hrs.
Vibration		Preconditioning: Run through reflow for 3 times. (IPC/JEDEC J-STD-020F Classification Reflow Profiles) Oscillation Frequency : 10Hz~2kHz~10Hz for 20 minutes Equipment : Vibration checker Total Amplitude :10g Testing Time : 12 hours (20 minutes, 12 cycles each of 3 orientations)

Item	Performance	Test Condition														
Bending	Appearance : No damage. Impedance : within±15% of initial value DCR : within±15% of initial value and shall not exceed the specification value	Shall be mounted on a FR4 substrate of the following dimensions: >=0805 inch(2012mm):40x100x1.2mm <0805 inch(2012mm):40x100x0.8mm Bending depth: >=0805 inch(2012mm):1.2mm <0805 inch(2012mm):0.8mm duration of 10 sec.														
Shock		<table><tr><th>Type</th><th>Peak value (g's)</th><th>Normal duration (D) (ms)</th><th>Wave form</th><th>Velocity change (V)ft/sec</th></tr><tr><td>SMD</td><td>50</td><td>11</td><td>Half-sine</td><td>11.3</td></tr><tr><td>Lead</td><td>50</td><td>11</td><td>Half-sine</td><td>11.3</td></tr></table> 3 shocks in each direction along 3 perpendicular axes. (18 shocks).	Type	Peak value (g's)	Normal duration (D) (ms)	Wave form	Velocity change (V)ft/sec	SMD	50	11	Half-sine	11.3	Lead	50	11	Half-sine
Type	Peak value (g's)	Normal duration (D) (ms)	Wave form	Velocity change (V)ft/sec												
SMD	50	11	Half-sine	11.3												
Lead	50	11	Half-sine	11.3												
Solderability	More than 95% of the terminal electrode should be covered with solder	a. Method B, 4hrs @155°C dry heat @235°C±5°C Testing Time : 5 +0/-0.5 seconds b. Method D category 3. (8hours ± 15 min)@ 260°C±5°C Testing Time : 30 +0/-0.5 seconds														
Resistance to Soldering Heat		Depth: completely cover the termination <table><tr><th>Temperature(°C)</th><th>Time(s)</th><th>Temperature ramp/immersion and emersion rate</th><th>Number of heat cycles</th></tr><tr><td>260 ±5 (solder temp)</td><td>10 ±1</td><td>25mm/s ±6 mm/s</td><td>1</td></tr></table>	Temperature(°C)	Time(s)	Temperature ramp/immersion and emersion rate	Number of heat cycles	260 ±5 (solder temp)	10 ±1	25mm/s ±6 mm/s	1						
Temperature(°C)	Time(s)	Temperature ramp/immersion and emersion rate	Number of heat cycles													
260 ±5 (solder temp)	10 ±1	25mm/s ±6 mm/s	1													
Terminal Strength	Appearance : No damage. Impedance : within±15% of initial value DCR : within±15% of initial value and shall not exceed the specification value	Preconditioning: Run through reflow for 3 times. (IPC/JEDEC J-STD-020F Classification Reflow Profiles) With the component mounted on a PCB with the device to be tested apply a force (>0805:1kg, <=0805:0.5kg) to the side of a device being tested. This force shall be applied for 60 +1 seconds. Also the force shall be applied gradually as not to apply a shock to the component being tested. 														

Soldering and Mounting

1-1. Soldering

Mildly activated rosin fluxes are preferred. TAI-TECH terminations are suitable for re-flow soldering systems. If hand soldering cannot be avoided, the preferred technique is the utilization of hot air soldering tools.

1-1.1 Soldering Reflow:

Recommended temperature profiles for lead free re-flow soldering in Figure 1. Table 1.1&1.2 (J-STD-020F)

1-1.2 Solder Wave:

Wave soldering is perhaps the most rigorous of surface mount soldering processes due to the steep rise in temperature seen by the circuit when immersed in the molten solder wave. Due to the risk of thermal damage to products, wave soldering of large size products is discouraged. Recommended temperature profile for wave soldering is shown in Figure 3.

1-1.3 Soldering Iron:

Products attachment with a soldering iron is discouraged due to the inherent process control limitations. In the event that a soldering iron must be employed the following precautions are recommended. (Figure 2.)

- Preheat circuit and products to 150°C
- Never contact the ceramic with the iron tip
- Use a 20 watt soldering iron with tip diameter of 1.0mm
- 350°C tip temperature (max)
- 1.0mm tip diameter (max)
- Limit soldering time to 4~5sec.

Fig.1 Soldering Reflow

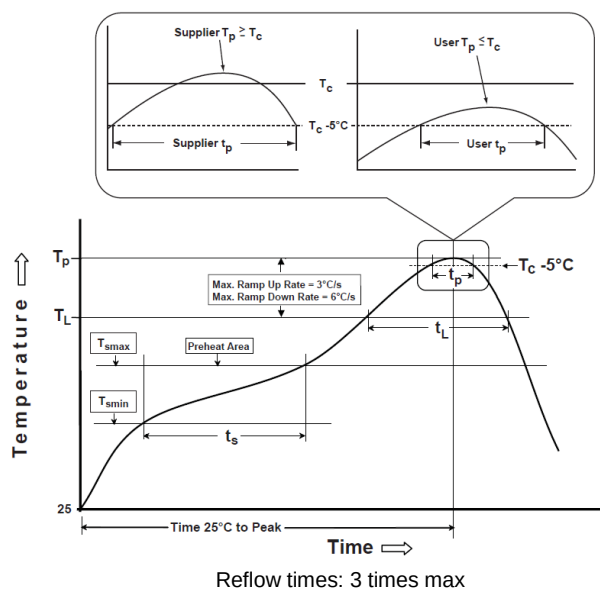


Fig.2 Iron soldering temperature profiles

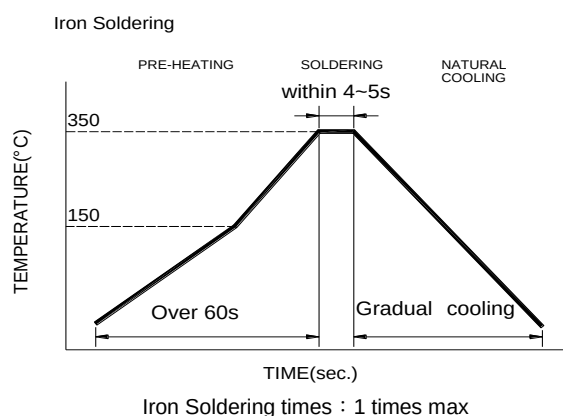


Fig.3 Wave Soldering

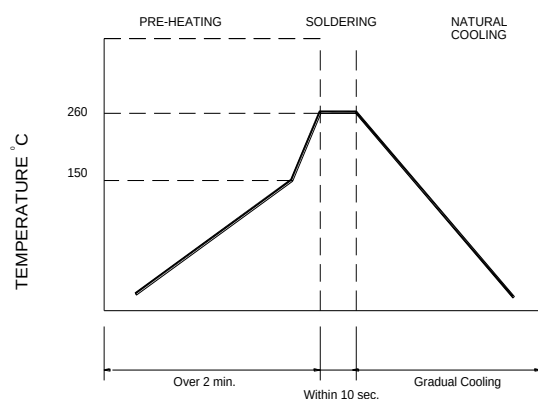


Table (1.1): Reflow Profiles

Profile Type:	Pb-Free Assembly
Preheat -Temperature Min(T_{smin}) -Temperature Max(T_{smax}) -Time(t_s)from(T_{smin} to T_{smax})	150°C 200°C 60-120seconds
Ramp-up rate(T_L to T_p)	3°C/second max.
Liquidus temperature(T_L) Time(t_L)maintained above T_L	217°C 60-150 seconds
Classification temperature(T_c)	See Table (1.2)
Time(t_p) at $T_c - 5^\circ\text{C}$ (T_p should be equal to or less than T_c .)	< 30 seconds
Ramp-down rate(T_p to T_L)	6°C /second max.
Time 25°C to peak temperature	8 minutes max.

T_p : maximum peak package body temperature, **T_c** : the classification temperature.

For user (customer) **T_p** should be equal to or less than **T_c** .

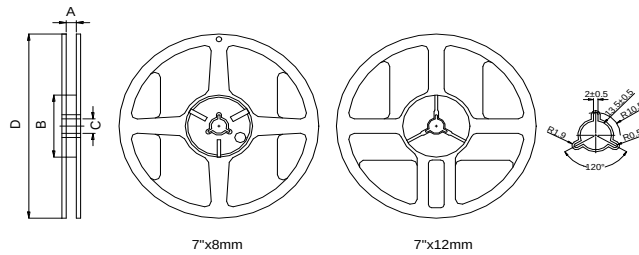
Table (1.2) Package Thickness/Volume and Classification Temperature (T_c)

	Package Thickness	Volume mm ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
PB-Free Assembly	<1.6mm	260°C	260°C	260°C
	1.6-2.5mm	260°C	250°C	245°C
	≥2.5mm	250°C	245°C	245°C

Reflow is referred to standard IPC/JEDEC J-STD-020F °

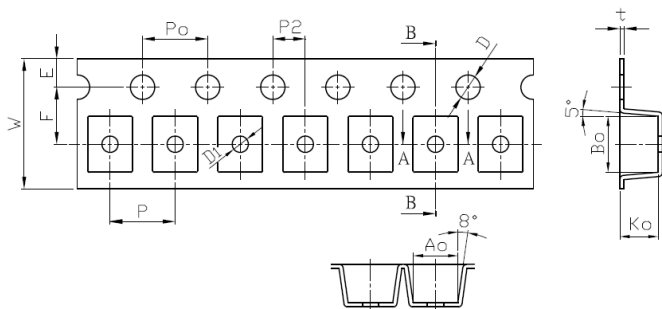
8. Packaging Information

8-1. Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
7"x8mm	8.4±1.0	50 min.	13.0±0.8	178.0±2.0

8-2. Tape Dimension / 8mm

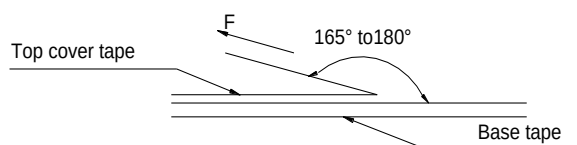


Series	Size	W(mm)	P(mm)	E(mm)	F(mm)	P2(mm)	D(mm)	D1(mm)	Po(mm)	Ao(mm)	Bo(mm)	Ko(mm)	t(mm)	10Po(mm)
BPH	322521	8.00±0.1	4.00±0.1	1.75±0.1	3.50±0.05	2.00±0.05	1.5+0.1/-0	1.0±0.10	4.00±0.1	2.75±0.1	3.45±0.1	2.35±0.1	0.26±0.05	40.0±0.20

8-3. Packaging Quantity

Chip size	Chip / Reel	Inner box	Middle box	Carton
322521	1000	5000	25000	50000

8-4. Tearing Off Force



The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions.

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

Application Notice

• Storage Conditions(component level)

To maintain the solderability of terminal electrodes:

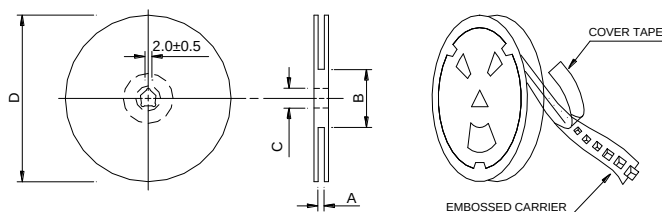
1. TAI-TECH products meet IPC/JEDEC J-STD-020F standard-MSL, level 1.
2. Temperature and humidity conditions: Less than 40°C and 60% RH.
3. Recommended products should be used within 12 months form the time of delivery.
4. The packaging material should be kept where no chlorine or sulfur exists in the air.

• Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

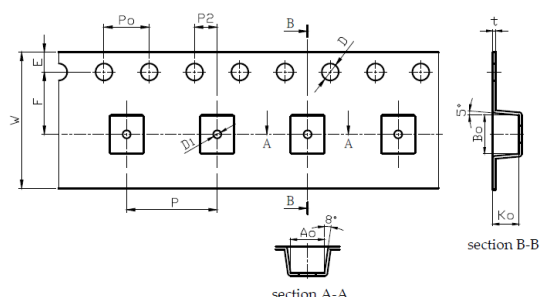
8. Packaging Information

8-1. Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
13"x12mm	12.5±0.5	100.0±2.0	13.5±0.5	330

8-2. Tape Dimension / 12mm

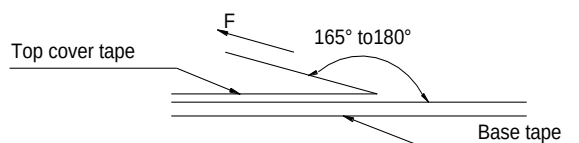


Series	Size	W(mm)	P(mm)	E(mm)	F(mm)	P2(mm)	D(mm)	D1(mm)	Po(mm)	Ao(mm)	Bo(mm)	Ko(mm)	t(mm)	10Po(mm)
BPH	323023	12.00±0.10	8.00±0.10	1.75±0.10	5.50±0.05	2.00±0.05	1.5+0.1/-0	0.70±0.10	4.00±0.10	3.00±0.10	3.40±0.10	2.31±0.10	0.25±0.05	40.0±0.20

8-3. Packaging Quantity

Chip size	Chip / Reel	Inner box	Carton
323023	3000	6000	48000

8-4. Tearing Off Force



The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions.

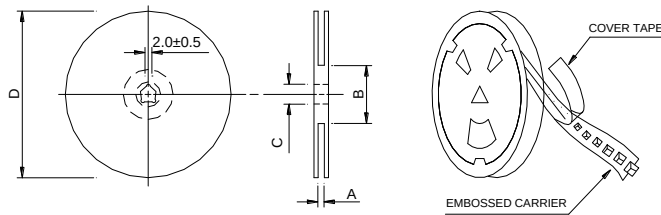
Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

Application Notice

- Storage Conditions(component level)
To maintain the solderability of terminal electrodes:
 1. TAI-TECH products meet IPC/JEDEC J-STD-020F standard-MSL, level 1.
 2. Temperature and humidity conditions: Less than 40°C and 60% RH.
 3. Recommended products should be used within 12 months from the time of delivery.
 4. The packaging material should be kept where no chlorine or sulfur exists in the air.
- Transportation
 1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
 2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
 3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

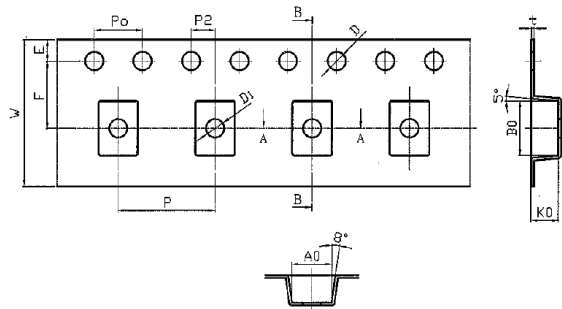
8. Packaging Information

8-1. Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
13"x12mm	12.5±0.5	100.0±2.0	13.5±0.5	330

8-2. Tape Dimension / 12mm

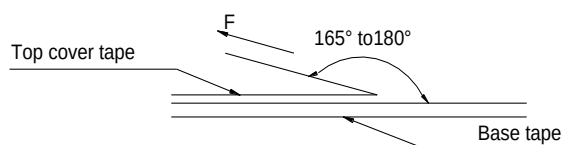


Series	Size	W(mm)	P(mm)	E(mm)	F(mm)	Po(mm)	P2(mm)	D(mm)	D1(mm)	Ao(mm)	Bo(mm)	Ko(mm)	t(mm)
BPH	403022	12.0±0.10	8.00±0.10	1.75±0.10	5.50±0.05	4.00±0.10	2.00±0.05	1.50+0.10/-0.00	1.50±0.10	3.25±0.10	4.45±0.10	2.25±0.10	0.24±0.05

8-3. Packaging Quantity

Chip size	Chip / Reel	Inner box	Carton
BPH403022	4000	8000	64000

8-4. Tearing Off Force



The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions.

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

Application Notice

• Storage Conditions(component level)

To maintain the solderability of terminal electrodes:

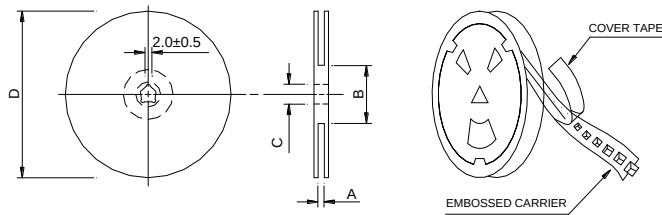
1. TAI-TECH products meet IPC/JEDEC J-STD-020F standard-MSL, level 1.
2. Temperature and humidity conditions: Less than 40°C and 60% RH.
3. Recommended products should be used within 12 months form the time of delivery.
4. The packaging material should be kept where no chlorine or sulfur exists in the air.

• Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

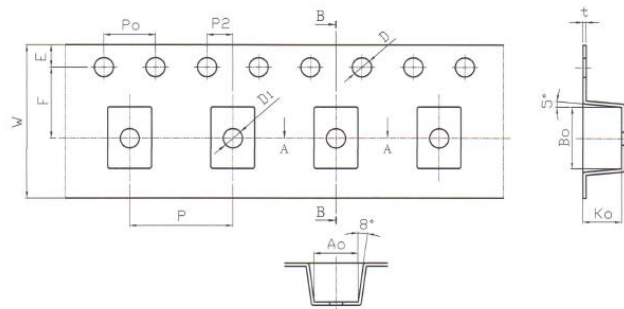
8. Packaging Information

8-1. Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
13"x12mm	12.5±0.5	100.0±2.0	13.5±0.5	330

8-2. Tape Dimension / 12mm

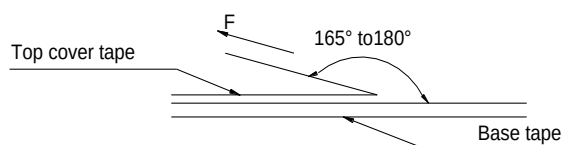


Series	Size	W(mm)	P(mm)	Po(mm)	Ao(mm)	Bo(mm)	Ko(mm)	t(mm)	E(mm)	F(mm)	P2(mm)	D(mm)	D1(mm)
BPH	403025	12.±0.10	8.0±0.10	4.0±0.10	3.30±0.10	4.80±0.10	3.10±0.10	0.28±0.05	1.75±0.10	5.50±0.05	2.00±0.05	1.50+0.10/-0.00	1.50±0.10

8-3. Packaging Quantity

Chip size	Chip / Reel	Inner box	Carton
BPH403025	3000	6000	48000

8-4. Tearing Off Force



The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions.

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

Application Notice

• Storage Conditions(component level)

To maintain the solderability of terminal electrodes:

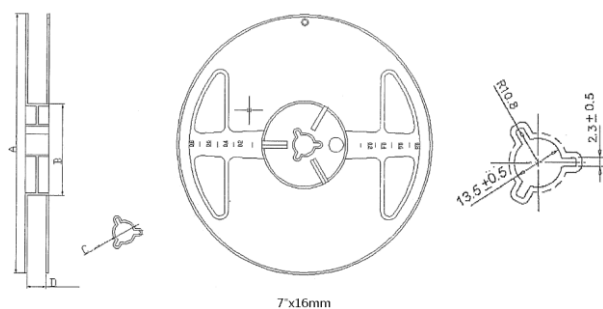
1. TAI-TECH products meet IPC/JEDEC J-STD-020F standard-MSL, level 1.
2. Temperature and humidity conditions: Less than 40°C and 60% RH.
3. Recommended products should be used within 12 months from the time of delivery.
4. The packaging material should be kept where no chlorine or sulfur exists in the air.

• Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

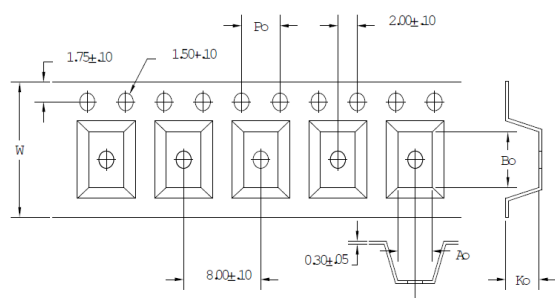
8. Packaging Information

8-1. Reel Dimension



Type	A(mm)	B(mm)	C(mm)	D(mm)
7"x16mm	178.0 $\pm$ 2.0	60.0 $\pm$ 2.0	13.5 $\pm$ 0.5	16.7 $\pm$ 0.5

8-2. Tape Dimension / 16mm

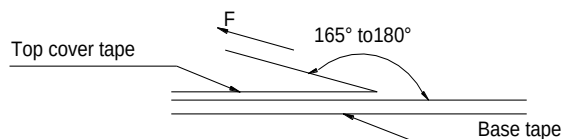


Series	Size	W(mm)	Po(mm)	Ao(mm)	Bo(mm)	Ko(mm)
BPH	853025	16.0 $\pm$ 0.30	4.0 $\pm$ 0.10	3.25 $\pm$ 0.10	9.25 $\pm$ 0.10	3.05 $\pm$ 0.10

8-3. Packaging Quantity

Chip size	Chip / Reel	Inner box	Middle box	Carton
BPH853025	500	2000	10000	20000

8-4. Tearing Off Force



The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions.

Room Temp. ($^\circ\text{C}$)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

Application Notice

- Storage Conditions(component level)
To maintain the solderability of terminal electrodes:
 1. TAI-TECH products meet IPC/JEDEC J-STD-020F standard-MSL, level 1.
 2. Temperature and humidity conditions: Less than 40°C and 60% RH.
 3. Recommended products should be used within 12 months form the time of delivery.
 4. The packaging material should be kept where no chlorine or sulfur exists in the air.
- Transportation
 1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
 2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
 3. Bulk handling should ensure that abrasion and mechanical shock are minimized.