

PRODUCT SPECIFICATION

SPEC. NO: D-2603-07

DATE: Mar.3,2026

CUSTOMER'S PRODUCT NAME:

EMTEK PRODUCT NAME:

BWWP5852454R7M00

THIS SPECIFICATION IS:

- ☐ FULLY ACCEPTED
- ☐ DENIED
- ☐ ACCEPTED UNDER THE FOLLOWING CONDITIONS



SIGNATURE: _____ DATE: _____

NAME(PRINT): _____

TITLE: _____

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EMTEK CO., LTD.

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1. Features

- High saturation open type wire wound power inductor.
- Suitable for large currents.
- Ideal for DC – DC converter applications.
- Excellent Environmental and Mechanical Reliability

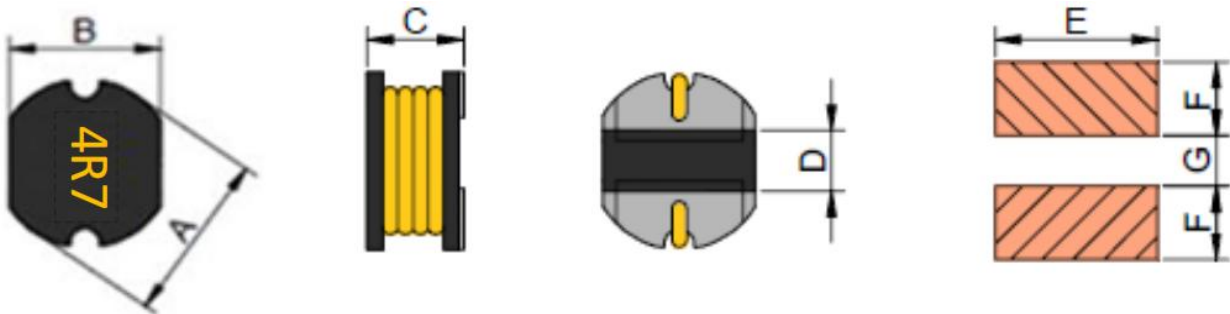
2. Application

- Power supply for VTRs.
- OA equipment, Portable communication devices.
- LCD televisions, Notebook PCs
- DC / DC converters, etc.

3. Part numbering

B	-	WWP	-	585245	-	4R7	-	M	-	00
Grade		Product Series		Dimensions(mm)		Impedance (Ω)		Tolerance		Control code

4. Appearance and Dimensions



A	B	C	D	E	F	G
5.8±0.3	5.2±0.3	4.5±0.3	1.3	5.6	2.6	1.1



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5. Rating

NOTE:

- Operating temperature: -40°C~+125°C

ELECTRICAL CHARACTERISTICS(@ 25°C)

Part No.	Inductance Lo (uH) $\pm 20\%$	Test Frequency (Hz/v)	DCR (m Ω) max.	IDC. (A) max.
BWWP5852454R7M00	4.7	100KHZ/1V	50.0	3.0

* IDC : This indicates the value of current when the inductance is 10% lower than it's initial value at D.C. superimposition or D.C.current when at $\Delta T=40^{\circ}\text{C}$,whichever is lower. (Ta=20°C)



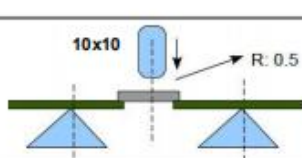
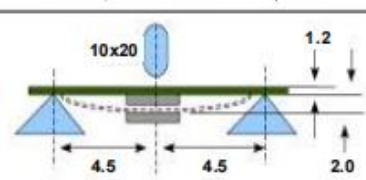
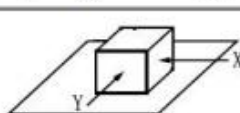
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6. Reliable Performance

SN	Test Item	Test Method	Standard	Samples (pcs)
1	Thermal Shock 冷热冲击测试	Temperature: - 40 °C / +85 °C kept stabilized for 30 minutes ; each Cycle: 100 Cycles (power off)	No appearance deformation Inductance deviation within $\pm 5\%$	30
2	Humidity Resistance 防潮性能测试	Humidity: 90%- 95% RH; Temperature: 40 ± 2 °C Test Time: 500 ± 12 Hours	No appearance deformation Inductance deviation within $\pm 5\%$	30
3	High Temperature 耐热测试	Temperature: 105 ± 2 °C Testing Time: 500 ± 12 Hours	No appearance deformation Inductance deviation within $\pm 5\%$	30
4	Low Temperature 耐寒测试	Temperature: - 40 ± 2 °C Time: 500 ± 12 Hours	No appearance deformation Inductance deviation within $\pm 5\%$	30
5	Temperature and Humidity Cycle 温/湿度循环测试	Temperature Humidity Time 25 °C ± 2 °C 90% - 95% RH 3.0 Hours 55 °C ± 2 °C 95% - 96% RH 5.0 Hours 25 °C ± 2 °C 90% - 95% RH 3.0 Hours Cycle: 100 Cycles	No appearance deformation Inductance deviation within $\pm 5\%$	30
6	Reflow Heating Resistance 回流焊耐热性测试	IR-Reflow (3 Times) Preheat: 150 ~ 200°C Time: 60 - 120 sec. Peak Temp.: 255 ± 5 °C Time: 30 sec. Reflow Temp. above 217 °C Time: 60 - 150 sec.	No appearance deformation Inductance deviation within $\pm 5\%$	30
7	Iron Heating Resistance 烙铁焊耐热性测试	Soldering Temp.: 350 ± 5 °C Time: 3 ± 1 seconds	No appearance deformation Inductance deviation within $\pm 5\%$	30
8	Withstand Voltage 耐压测试	100 VDC / 1 Minute, Between core & winding	No dielectric breakdown	30
9	Rated Current 额定电流测试	Temperature: 25 ± 3 °C; Test Time: 10 Minutes Load: Rated Current	Inductance and Temp. Rise variation within spec.	30
10	Bending Strength 折断力测试	Uint:mm IR-Reflow (2 times) Force : 1 kgf / min. 	No appearance deformation Inductance deviation within $\pm 3\%$	30
11	Flexure Strength 抗弯强度测试	Uint:mm IR-Reflow (2 times) Solder cream 0.15mm 	No appearance deformation Inductance deviation within $\pm 3\%$	30
12	Electrode Strength 电极强度测试	Mounted on PCB Pushed in X, Y direction, Strength: 5N for 10 ± 2 seconds. 	No electrode detachment No appearance deformation Inductance deviation within $\pm 3\%$	30
13	Vibration 振动测试	Frequency: 10Hz-55Hz Amplitude: 1.5mm Direction: X,Y,Z Time: 2 Hours each Product: After packing	No appearance deformation Inductance deviation within $\pm 3\%$	30
14	Dropping 跌落测试	Freely dropped down; Height: 1m ; Direction: 1 Angle ridge; 3 Surfaces. Product: After packing	No appearance deformation Inductance deviation within $\pm 3\%$	30



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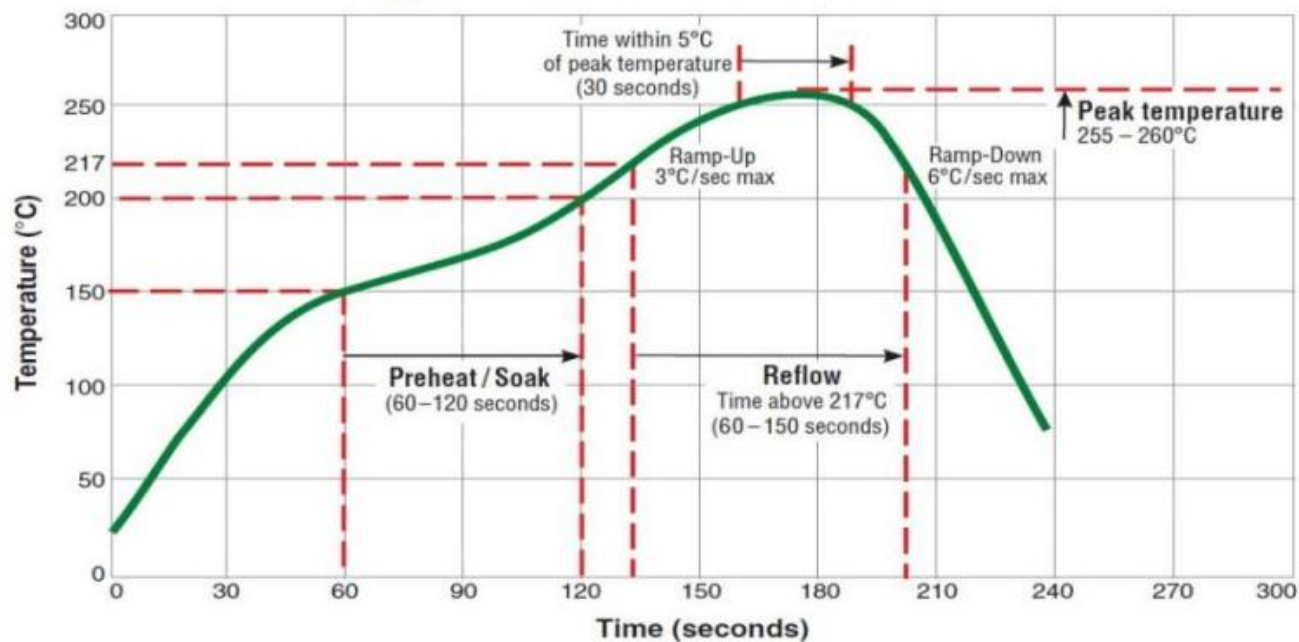
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7.Recommended Soldering Conditions

Typical RoHS Reflow Profile



1) Lead free soldering

When using products with lead free soldering, we request to use them after confirming of adhesion, temperature of resistance to soldering heat, soldering etc. sufficiently.

2) Soldering iron

Put the soldering iron on the land-pattern.

Soldering iron's temperature - Below 350°C (FCD43 Type).

Duration - 3 seconds or less

The soldering iron should not directly touch the inductor.



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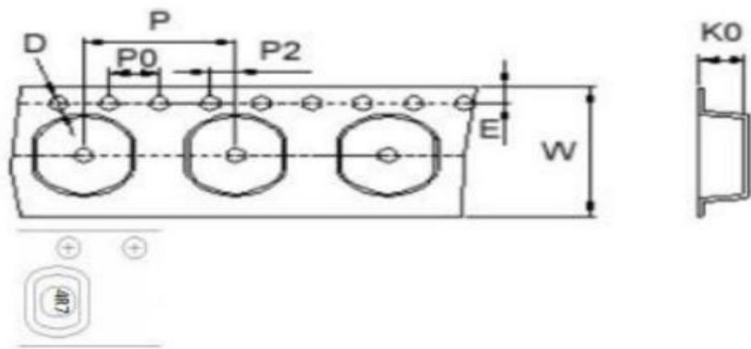
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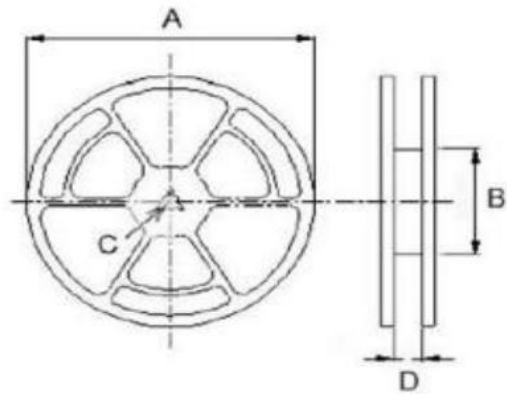
8.Packaging

Carrier Tape (Unit:mm)



Item	K0	D	E	W	P	P0	P2
Dimension	4.8 ± 0.3	1.6 ± 0.2	1.8 ± 0.2	16 ± 0.3	8 ± 0.2	4 ± 0.2	2 ± 0.2

Reel Dimensions



Item	Dimension
A	330 ± 0.5
B	100 ± 0.5
C	13 ± 0.5
D	16.5 ± 0.5

QTY

Reel (Pcs) 1500

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9.Storage

(1) Storage period

Use the products within 6 months after delivered. Solderability should be checked if this period is exceeded.

(2) Storage conditions

●Storage temperature: Below 40℃

●Storage environment: Below 70% RH

(3) Delivery

Care should be taken when transporting or handling product to avoid excessive vibration or mechanical shock.

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