SPECIFICATION FOR APPROVAL

Customer：

Customer P/N:

Drawing No：

Quantity： **Pcs.** **Date：**

Chilisin P/N： **BPCJFS0707468R2MAE**

Automotive Grade Inductor

Halogen Free
RoHS Compliant
REACH Compliant
Lead Free Solders
AEC-Q200

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E-mail：cect@chilisin.com

Drawn by	Checked by	Approved by
Jay	Marco	Vincent

REVISIONS

REV.	Description	Date	Approvaled by	Checked by	Checked by	Prepared by
00	Issue	2022.08.22	Vincent	Marco	Hank	Jay

BPCJFS070746-Series Specification

1 Scope: This specification applies to the Pb Free high current type SMD inductors

2 Part Numbering:

B	PCJ	FS	070746	4R7	M	AE
①	②	③	④	⑤	⑥	⑦

① Grade Code
② Product Code
③ Control Code
④ Dimensions Code
⑤ Inductance Code
⑥ Tolerance Code
⑦ Inner Control Code

3 Rating:

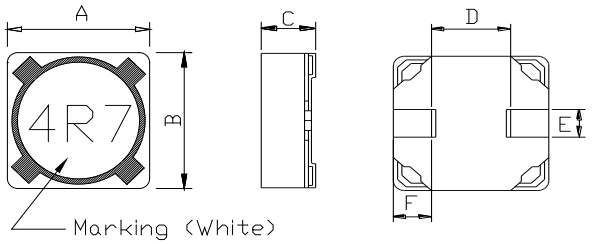
Operating Temperature: －40℃ ~ 125℃(Including self - temperature rise)

Storage Temperature: －40℃ ~ 125℃

4 Standard Testing Condition:

	Unless otherwise specified	In case of doubt
Temperature	Ordinary Temperature(15 to 35℃)	20 to 30℃
Humidity	Ordinary Humidity(25 to 85% RH)	50 to 80 %RH

5 Configuration and Dimensions:



A:	7.30±0.5	mm
B:	7.30±0.5	mm
C:	4.60 Max.	mm
D:	3.70 Typ.	mm
E:	1.65 Typ.	mm
F:	1.50 Typ.	mm

BPCJFS070746-Series Specification

6 Electrical Characteristics:

Part No.	Inductance L(μH)	Test Frequency	Resistance RDC(Ω) Max.	Rated DC Current Isat(A)	Rated DC Current Irms(A)	Tolerance	Marking
BPCJFS0707461R0□AE	1.0	100kHz/0.25V	38.5 m	8.0	3.70	T	1R0
BPCJFS0707463R3□AE	3.3	100kHz/0.25V	70.0 m	4.7	2.50	M,T	3R3
BPCJFS0707464R7□AE	4.7	100kHz/0.25V	32.0 m	4.4	3.16	M,T	4R7
BPCJFS0707466R8□AE	6.8	100kHz/0.25V	38.0 m	3.3	2.91	M,T	6R8
BPCJFS0707468R2□AE	8.2	100kHz/0.25V	53.0 m	3.0	2.70	M,T	8R2
BPCJFS070746221□AE	220	100kHz/0.25V	1.30	0.5	0.56	M,T	221

NOTE: tolerance M(±20%),T(±30%)

1.Isat： Based on inductance change (△L/Lo：drop 10% Typ.) @ambient Temperature : 25℃

2.Irms： Based on temperature rise (△T： 40℃ Typ.)

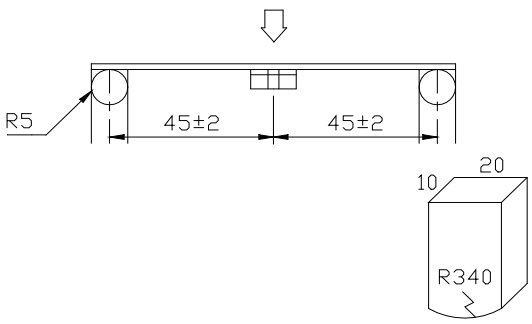
3.Rated DC Current： The less value which is Isat or Irms.

BPCJFS070746-Series Specification

ELECTRICAL

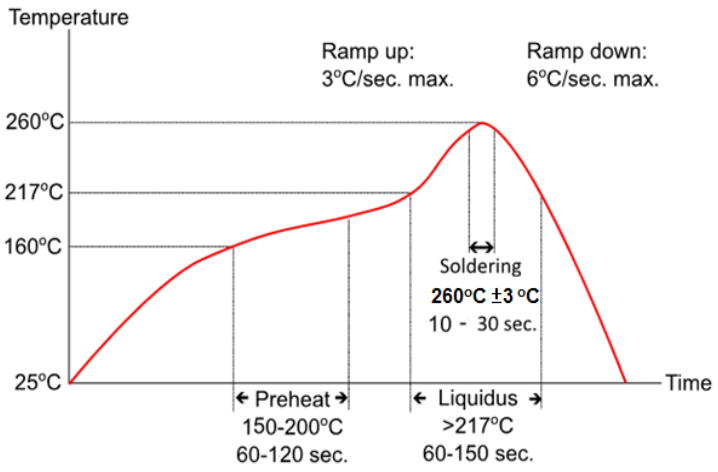
TEST ITEM	SPECIFICATION	TEST DETAILS
Temperature characteristics	△L/L20℃≦±10% 0～2000 ppm/℃	The test shall be performed after the sample has stabilized in an ambient temperature of -20 to +85℃,and the value calculated based on the value applicable in a normal temperature and narmal humidity shall be △L/L20℃≦±10%.

MECHANICAL

TEST ITEM	SPECIFICATION	TEST DETAILS
Substrate bending	△L/Lo≦±5% There shall be no mechanical damage or elec-trical damage.	The sample shall be soldered onto the printed circuit board in figure 1 and a load applied unitil the figure in the arrow direction is made approximately 3mm.(keep time 30 seconds) PCB dimension shall the page 7/9 F(Pressurization)  PRESSURE ROD figure-1

BPCJFS070746-Series Specification

MECHANICAL

TEST ITEM	SPECIFICATION	
Vibration	△L/Lo≦±5% There shall be no mechanical damage.	The sample shall be soldered onto the printed circuit board and when a vibration having an amplitude of 1.52mm and a frequency of from 10 to 55Hz/1 minute repeated should be applied to the 3 directions (X,Y,Z) for 2 hours each. (A total of 6 hours)
Solderability	New solder More than 90%	Flux (rosin, isopropyl alcohol{JIS-K-1522}) shall be coated over the whole of the sample before hard, the sample shall then be preheated for about 2 minutes in a temperature of 130～150℃ and after it has been immersed to a depth 0.5mm below for 3±0.2 seconds fully in molten solder M705 with a temperature of 245±5℃. More than 90% of the electrode sections shall be couered with new solder smoothly when the sample is taken out of the solder bath.
Resistance to Soldering heat (reflow soldering)	There shall be no damage or problems.	Temperature profile of reflow soldering  The specimen shall be passed through the reflow oven with the condition shown in the above profile for 1 time. The specimen shall be stored at standard atmospheric conditions for 1 hour, after which the measurement shall be made.

BPCJFS070746-Series Specification

ENVIRONMENT CHARACTERISTICS

TEST ITEM	SPECIFICATION	
High temperature storage	△L/Lo≦±5% There shall be no mechanical damage.	The sample shall be left for 96±4 hours in an atmospere with a temperature of 125℃ and a normal humidity. Upon completion of the measurement shall be made after the sample has been left in a normal temperature and normal humidity for 1 hour.
Low temperature storage	△L/Lo≦±5% There shall be no mechanical damage.	The sample shall be left for 96±4 hours in an atmosphere with a temperature of -40±3℃. Upon completion of the test, the measurement shall be made after the sample has been left in a normal temperature and normal humidity for 1 hour.
Change of temperature	△L/Lo≦±5% There shall be no other dama-ge of problems	The sample shall be subject to 5 continuos cycles, such as shown in the table 2 below and then it shall be subjected to standard atmospheric conditions for 1 hour, after which measurement shall be made.
Moisture storage	△L/Lo≦±5% There shall be no mechanical damage.	The sample shall be left for 96±4 hours in a temperature of 40±2℃ and a humidity(RH) of 90～95%. Upon completion of the test, the measurement shall be made after the sample has been left in a normal temperature and normal humidity more than 1 hour.

table 2

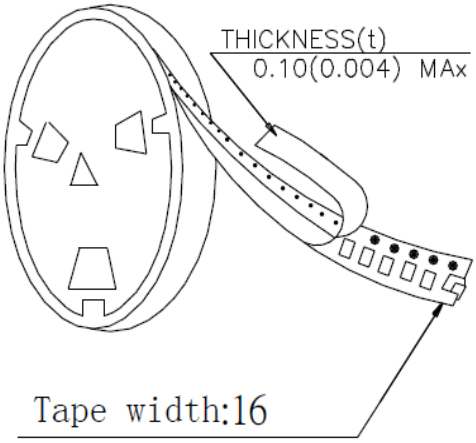
	Temperature	Duration
1	－40±3℃ (Themostat No.1)	30 min.
2	Standard atmospheric	No.1→No.2
3	125±2℃ (Themostat No.2)	30 min.
4	Standard atmospheric	No.2→No.1

Test conditions：

The sample shall be reflow soldered onto the printed circuit board in every test.

7 Packaging:

7.1 Packaging -Cover Tape

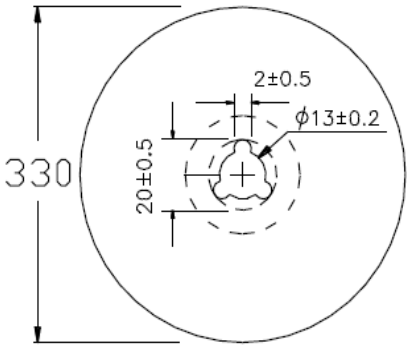


7.2 Packaging Quantity

TYPE	PCS/REEL
BPCJFS070746	1000

7.3 Reel Dimensions

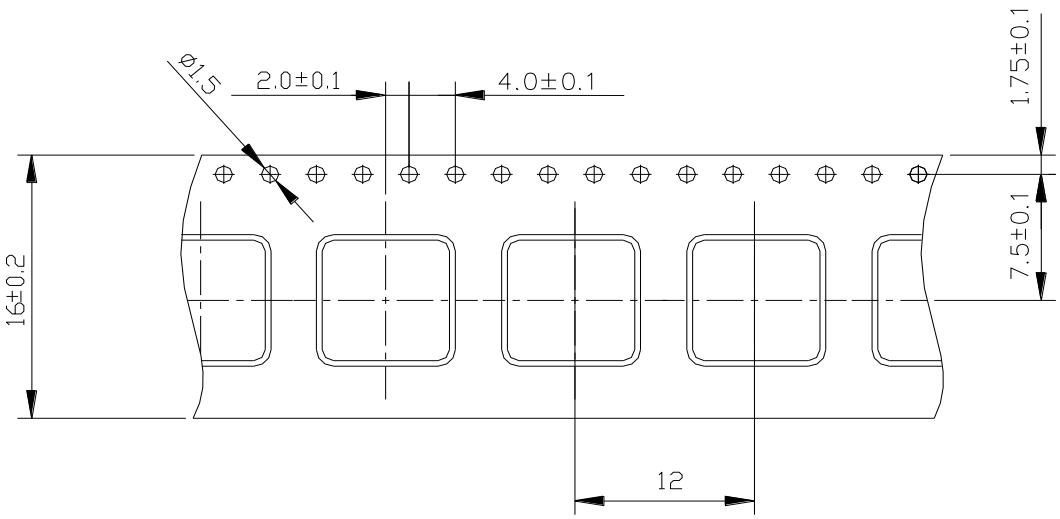
Unit : mm

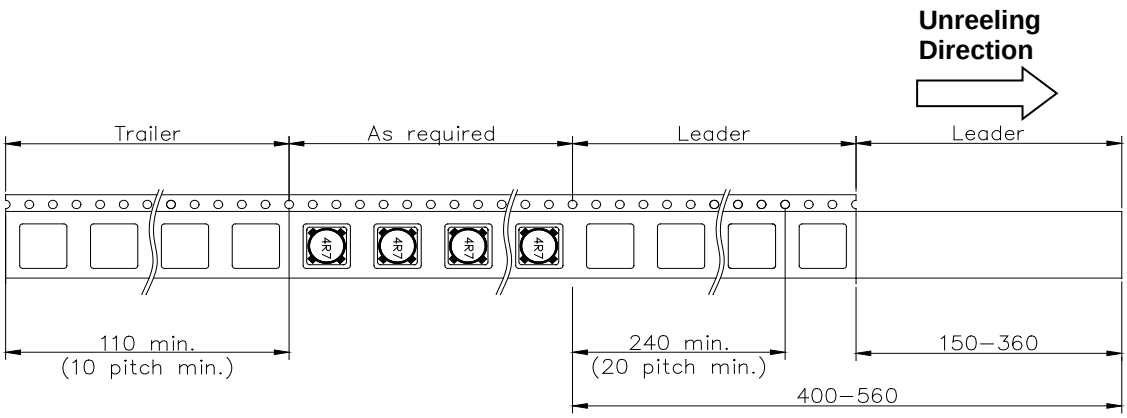


BPCJFS070746-Series Specification

7 Packaging:

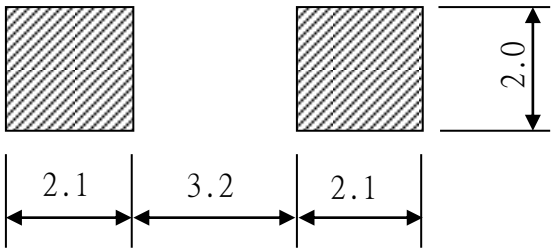
7.4 Tape Dimensions in mm





8 Recommended Land Pattern:

(STANDARD PATTERN) **Unit : mm**



9 Note:

1. Please make sure that your product has been evaluated and confirmed against your specifications when our product is mounted to your product.
2. Do not knock or drop.
3. All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose,under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.
4. Please keep the distance between transformer/coil and other components (refer to the standard IEC 950)
5. The moisture sensitivity level (MSL) of products is classified as level 1.

单击下面可查看定价，库存，交付和生命周期等信息

>>CHILISIN(奇力新)