



ISO9001 ISO14001 IATF16949 CHILISIN ELECTRONICS CORP.

RoHS & Halogen Free & REACH Compliance.

SPECIFICATION FOR APPROVAL

Customer : 超利維

Customer P/N:

Drawing No : IE1-8B0365

Quantity : X Pcs. Date : 2018/11/21

Chilisin P/N : HPPC12040-R33M-Q8ADF

| SPECIFICATION ACCEPTED BY: | |
|-------------------------------|--|
| COMPONENT ENGINEER | |
| ELECTRICAL ENGINEER | |
| MECHANICAL ENGINEER | |
| APPROVED | |
| REJECTED | |

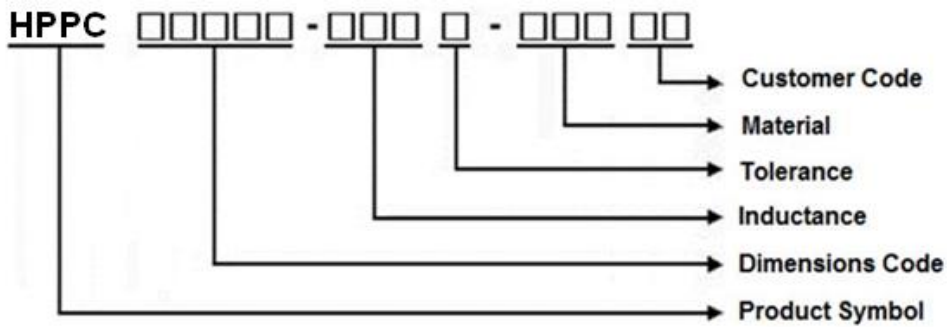
| | |
|--|--|
| <p>奇力新電子股份有限公司 Chilisin Electronics Corp No. 29, Alley 301, Tehhsin Rd., Hukou, Hsinchu 303, Taiwan TEL : +886-3- 599-2646 FAX : +886-3- 599-9176 E-mail : sales@chilisin.com http : //www.chilisin.com</p> | <p>東莞奇力新電子(東莞廠)有限公司 Chilisin Electronics (Dongguan) Co., Ltd. No. 78, Puxing Rd., Yuliangwei Administration Area, Qingxi Town, Dongguan City, Guangdong, China TEL : +86-769-8773-0251~3 FAX : +86-769-8773-0232 E-mail : cect@chilisin.com</p> |
| <p>奇力新電子(越南廠)有限公司 Chilisin Electronics (Vietnam) Limited No 143 - 145, Road No 10, VSIP Hai Phong, Lap Le Commune, Thuy Nguyen Dist, Haiphong City, Vietnam Tel : 84-316 255 688 Fax : 84-316 255 689 E-mail : sales@chilisin.com</p> | <p>奇力新電子(湖南廠)有限公司 HuNan Chilisin Electronics Technology Co., Ltd No. 8, Shaziao Liangshuijing Town, Yuanling County, Huaihua City, Hunan Province 419601, China Tel : 86-745-867-5882 E-mail : cect@chilisin.com</p> |

| | | |
|---------------------------------|-----------------------------------|---------------------------------------|
| Drawn by 吳韋邑 Wayne.Wu | Checked by 吳韋邑 Wayne.Wu | Approved by 劉建志 Richard.Liu |
|---------------------------------|-----------------------------------|---------------------------------------|

HPPC12040 Series Specification

1 Scope: This specification applies to Large current and Low Loss SMD Power INDUCTOR

2 Part Numbering:

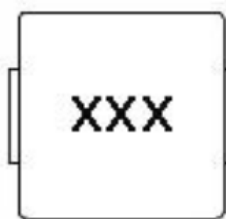


3 Rating:

Operating Temperature: - 55°C ~ 125°C

Storage Temperature: (on tape & reel): -20°C to +40°C; 75% RH max.

4 Marking:



Ex : HPPC12040-R33M-Q8ADF

Marking : R33

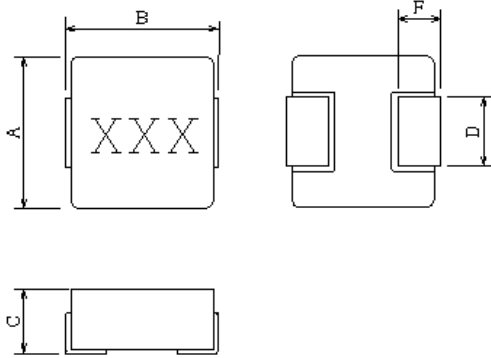
Marking color : Black

5 Standard Testing Condition

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

HPPC12040 Series Specification

6 Configuration and Dimensions:



Dimensions in mm

| TYPE | HPPC12040 |
|------|--------------|
| A | 12.6 ± 0.2 |
| B | 13.65 ± 0.35 |
| C | 3.8 ± 0.2 |
| D | 3.5 ± 0.5 |
| F | 2.5 ± 0.5 |

7 Electrical Characteristics:

| Part No. | Inductance (uH) | Tolerance (±%) | Test Freq. | I _{rms} (A) Typ | I _{sat} (A) Typ | RDC(mΩ) Max | Marking |
|----------------------|-----------------|----------------|-------------|--------------------------|--------------------------|-------------|---------|
| HPPC12040-R33M-Q8ADF | 0.33 | 20 | 100kHz,0.5V | 45 | 67 | 0.65 | R33 |

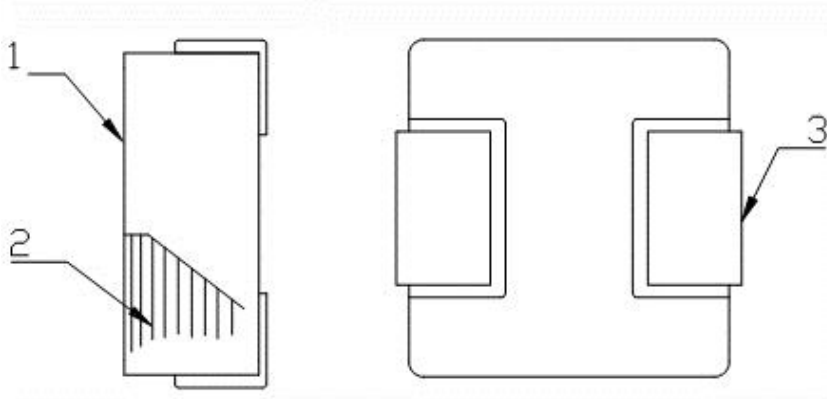
Note:

1. Operating temperature range -55°C ~125°C
2. I_{sat} for Inductance drop 30% from its value without current.
3. I_{rms} for a 40°C temperature rise from 25°C ambient.
4. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
Circuit design 125°C under worst case operating conditions. Component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
5. Absolute maximum voltage 30VDC

HPPC12040 Series Specification

8 HPPC12040 Series

8.1 Construction:



8.2 Material List:

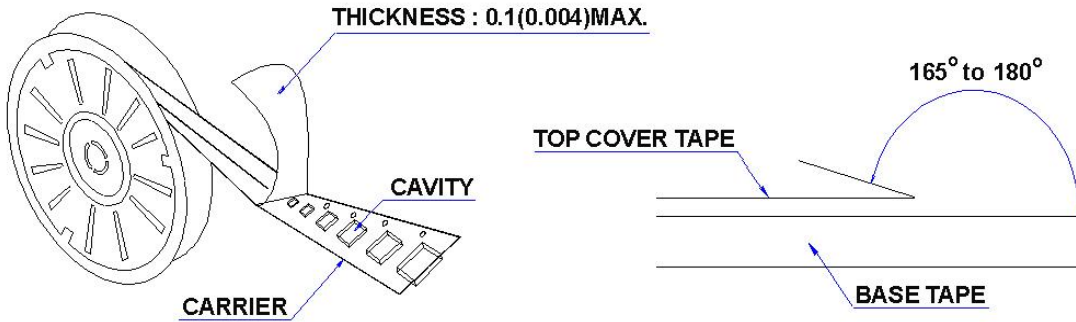
| No | Part | Material |
|----|------------------|-----------------------|
| 1 | COATING+ CORE | CARBONYL IRON POWDERS |
| 2 | WIRE | COPPER WIRE |
| 3 | TERMINAL | TERMINAL COPPER |

HPPC12040 Series Specification

9 PACKAGING

9.1 Packaging -Cover tape

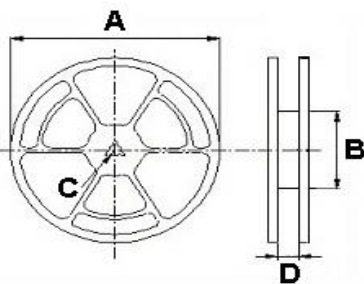
The force for tearing off cover tape is 10 to 130 grams in the arrow direction.



9.2 Packaging Quantity

| TYPE | PCS/REEL |
|-----------|----------|
| HPPC12040 | 500 |

9.3 Reel Dimensions



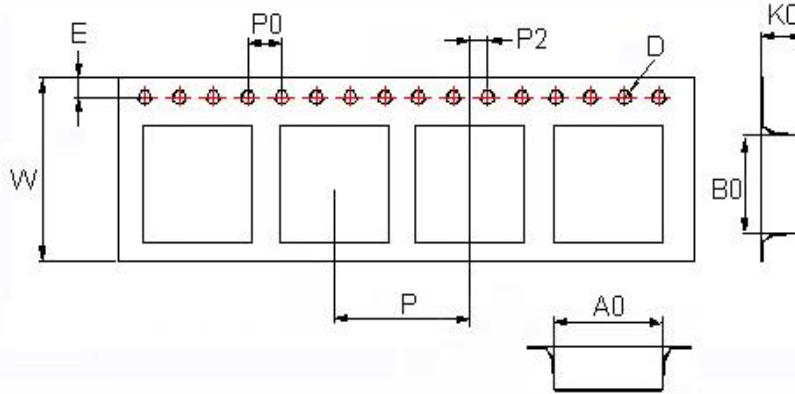
Dimensions in mm

| TYPE | A | B | C | D |
|-----------|-----|-----|----|------|
| HPPC12040 | 330 | 100 | 13 | 24.4 |

HPPC12040 Series Specification

9 PACKAGING

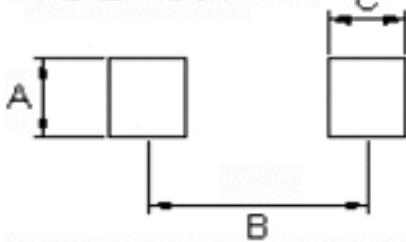
9.4 Tape Dimensions in mm



| TYPE | A0 | B0 | K0 | D | E | W | P | P0 | P2 |
|-----------|----|------|------|------|------|----|----|----|----|
| HPPC12040 | 13 | 14.6 | 4.25 | 1.55 | 1.75 | 24 | 16 | 4 | 2 |

10 Recommended Pattern

PAD LAYOUT



Dimensions in mm

| TYPE | A(mm) | B(mm) | C(mm) |
|-----------|-------|-------|-------|
| HPPC12040 | 5.5 | 11.25 | 3.25 |

11 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 nor 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.

HPPC12040 Series Specification

12 Graph:

