#### **BESP Series**



The series is designed specifically to enhance DDR5 application performance. Better ACR value at light load and the DCR value at heavy load.

Furthermore, the saturation current performance is also optimal, helping to reduce the ripple current and enhance the efficiency.

.

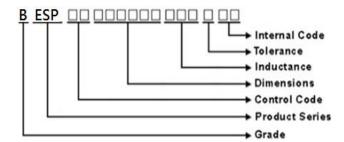
#### **Features**

- RoHS, Halogen Free and REACH Compliance
- Higher Isat and lower DCR · ACR with smaller chip size
- Low coil resistance with large currents.
- High Efficiency

### **Applications**

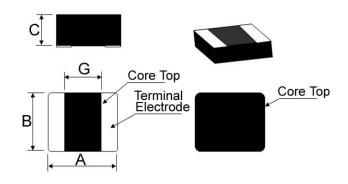
- Server
- Notebook
- SSD

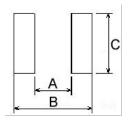
#### **Product Identification**



#### **Shape and Dimensions**

#### **Recommended Pattern**





#### Dimensions in mm

| Dimensions | ın | mm |  |
|------------|----|----|--|
|            |    |    |  |

| TYPE   | Α       | В       | С       | G       | TYPE   | Α   | В   | С   |
|--------|---------|---------|---------|---------|--------|-----|-----|-----|
| 252012 | 2.5±0.2 | 2.0±0.2 | 1.2 Max | 1.0 Typ | 252012 | 1.0 | 2.7 | 2.2 |
| 322512 | 3.2±0.2 | 2.5±0.2 | 1.2 Max | 1.2 Typ | 322512 | 1.2 | 3.4 | 2.7 |





## **Molding Power Inductors - BESP Series**

#### **Electrical Characteristics**

| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(MHz) | RDC(mΩ)<br>Max(Typ) | Isat(A)<br>Max(Typ) | Irms(A)<br>Max(Typ) |
|--------------------|--------------------|-------------------|----------------------------|---------------------|---------------------|---------------------|
| BESP002520121R0MJS | 1.00               | 20                | 1                          | 28.0(25.0)          | 3.0(3.3)            | 4.2(4.7)            |
| BESP002520121R5MJS | 1.50               | 20                | 1                          | 50.0(45.0)          | 2.4(2.7)            | 3.3(3.8)            |

#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

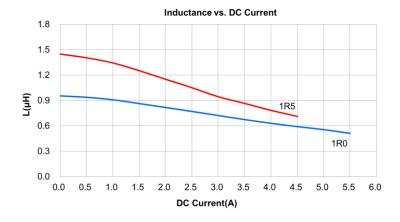
- Operating temperature range 40°C ~ 125°C (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40<sup>o</sup>C temperature rise from 25<sup>o</sup>C ambient with current
- Rated current : Isat or Irms, whichever is smaller
- Absolute maximum voltage 15VDC (Based on test method, it may not the same under different application, it is recommended to verify first.)

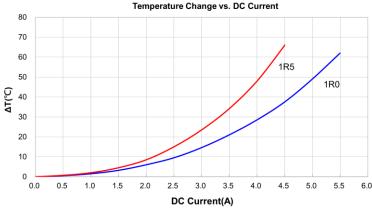
#### **Test Instruments:**

L: Agilent E4991/HP4286A+16197A/WP6500P (or equivalent), 1MHz 1V

RDC: CHEN HWA502BC/HP4338B (or equivalent)
Isat: Agilent E4980A+HP42841A (or equivalent)

Irms: Agilent 6641 SYSTEM DC POWER SUPPLY (or equivalent)









# **Molding Power Inductors - BESP Series**

#### **Electrical Characteristics**

| Part Number        | Inductance<br>(uH) | Tolerance<br>(±%) | Test<br>Frequency<br>(MHz) | RDC(mΩ)<br>Max(Typ) | lsat(A)<br>Max(Typ) | Irms(A)<br>Max(Typ) |
|--------------------|--------------------|-------------------|----------------------------|---------------------|---------------------|---------------------|
| BESP00322512R47MJS | 0.47               | 20                | 1                          | 12.0(10.5)          | 5.6(6.2)            | 6.0(6.5)            |
| BESP00322512R68MJS | 0.68               | 20                | 1                          | 16.5(14.0)          | 4.2(4.6)            | 5.5(6.0)            |

#### Note: When ordering, please specify tolerance code. Tolerance: M=±20%

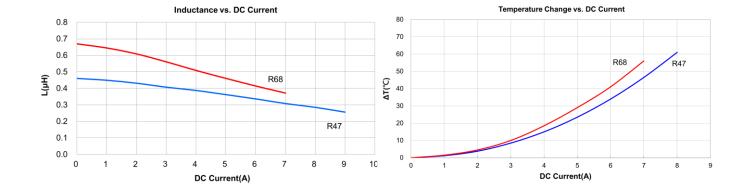
- Operating temperature range 40°C ~ 125°C (Including self temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40<sup>o</sup>C temperature rise from 25<sup>o</sup>C ambient with current
- Rated current: Isat or Irms, whichever is smaller
- Absolute maximum voltage 15VDC (Based on test method, it may not the same under different application, it is recommended to verify first.)

#### Test Instruments:

L: Agilent E4991/HP4286A+16197A/WP6500P (or equivalent), 1MHz 1V

RDC: CHEN HWA502BC/HP4338B (or equivalent)
Isat: Agilent E4980A+HP42841A (or equivalent)

Irms: Agilent 6641 SYSTEM DC POWER SUPPLY (or equivalent)



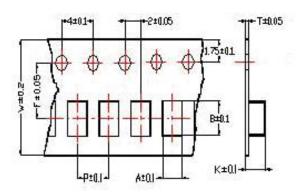




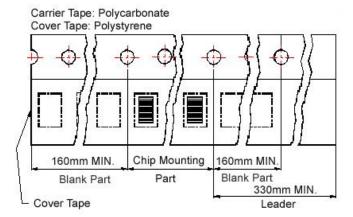
## **Molding Power Inductors - BESP Series**

### **Packaging Specifications**

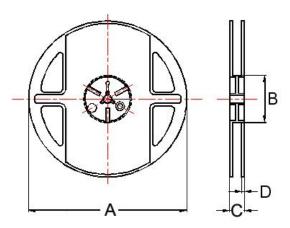
**Tape Dimensions** 



#### **Tape Material**



#### **Reel Dimensions**



#### Dimensions in mm

| TYPE   | Tape Dimensions |      |      |   |   |     |      | Reel Dimensions |    |    |     | Quantity   |
|--------|-----------------|------|------|---|---|-----|------|-----------------|----|----|-----|------------|
| IIFE   | Α               | В    | Т    | W | Р | F   | K    | Α               | В  | С  | D   | PCS / REEL |
| 252012 | 2.35            | 2.90 | 0.25 | 8 | 4 | 3.5 | 1.35 | 178             | 60 | 12 | 1.5 | 3000       |
| 322512 | 2.85            | 3.50 | 0.25 | 8 | 4 | 3.5 | 1.35 | 178             | 60 | 12 | 1.5 | 2000       |



# 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)