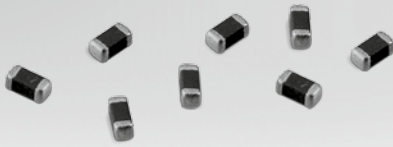


**Improved values!**



**Extended Product Range!**

### Characteristics

- Compact multilayer type
- Suitable for applications with high currents up to 2.7 A
- Magnetically shielded construction: No crosstalk
- Operating temperature:  $-40\text{ }^{\circ}\text{C}$  to  $+125\text{ }^{\circ}\text{C}$
- Available in two different types

### Applications

- DC/DC converters especially at high switching frequencies  $> 1\text{ MHz}$
- Portable devices like PDA and digital cameras

QR-Code

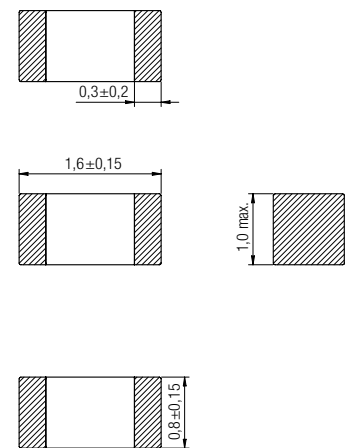


### Electrical properties

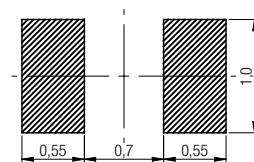
|     | Order Code      | L<br>$\pm 20\%$<br>( $\mu\text{H}$ ) | $I_R$ @ 20K<br>(mA) | $I_R$ @ 40K<br>(mA) | $I_{sat}$<br>(mA) | $R_{DC}$<br>( $\text{m}\Omega$ ) | $f_{res}$<br>(MHz) | Q  | Test Condition<br>L/Q<br>(MHz) | Qty. |
|-----|-----------------|--------------------------------------|---------------------|---------------------|-------------------|----------------------------------|--------------------|----|--------------------------------|------|
|     | 744 797 631 47  | 0.47                                 | 700                 | 950                 | 600               | 260                              | 250                | 10 | 1                              | 4000 |
| NEW | 744 797 631 47A | 0.47                                 | 1100                | 1500                | 1500              | 90                               | 190                | 10 |                                |      |
| NEW | 744 797 631 68  | 0.68                                 | 750                 | 1000                | 950               | 180                              | 150                | 10 |                                |      |
|     | 744 797 632 10  | 1.0                                  | 600                 | 800                 | 350               | 300                              | 150                | 14 |                                |      |
| NEW | 744 797 632 10A | 1.0                                  | 700                 | 900                 | 650               | 200                              | 120                | 12 |                                |      |
| NEW | 744 797 632 15  | 1.5                                  | 600                 | 850                 | 500               | 230                              | 100                | 12 |                                |      |
| NEW | 744 797 632 22  | 2.2                                  | 550                 | 800                 | 280               | 300                              | 80                 | 15 |                                |      |

$I_R$  referring to self-heating,  $I_{sat}$  referring to inductance loss of 30%

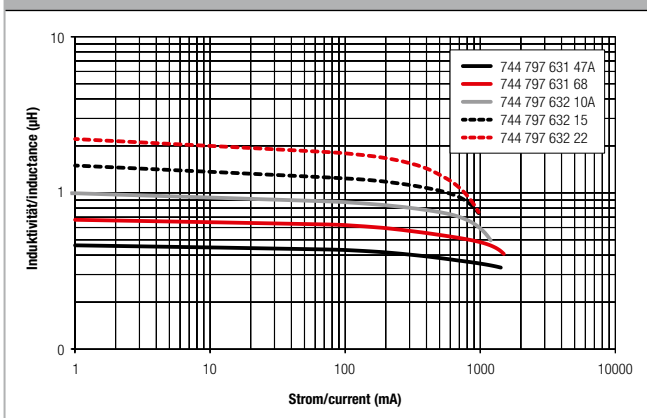
### Dimensions (in mm)



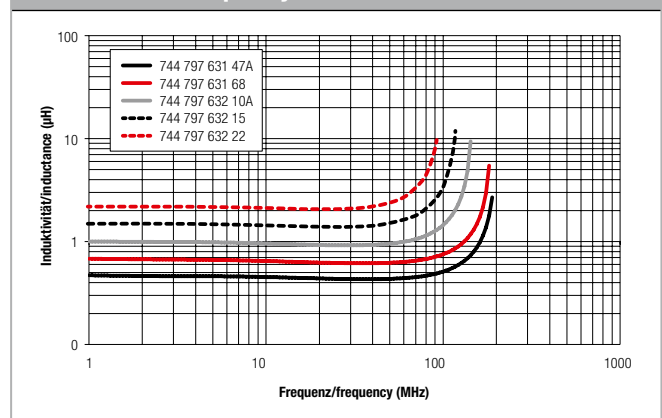
### Land pattern (in mm)



### Inductance vs. Current



### Inductance vs. Frequency

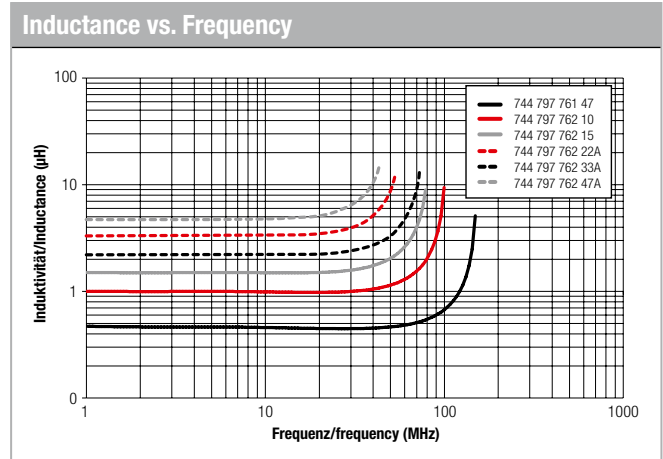
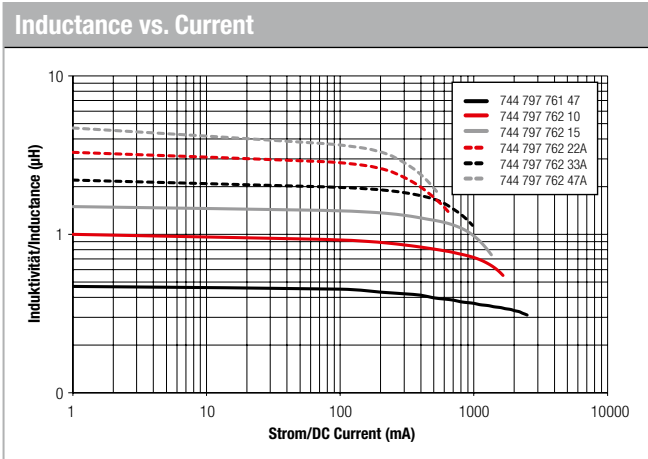
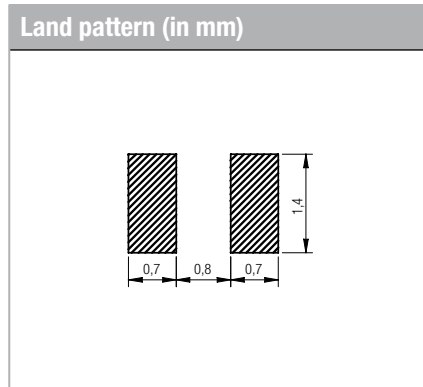
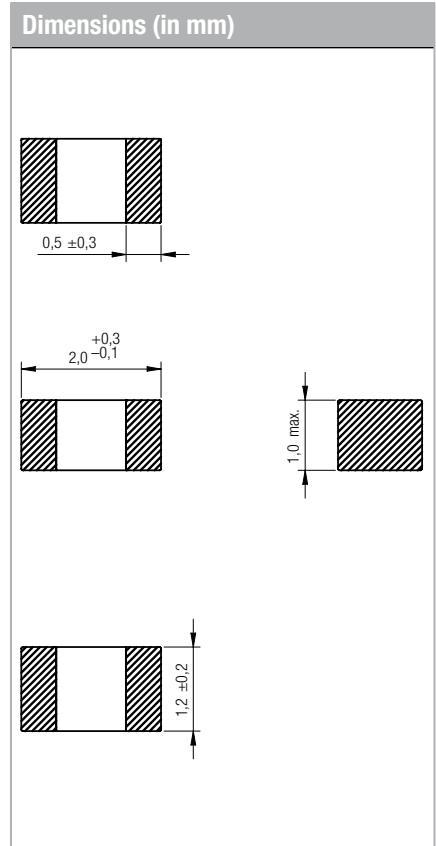


## Power Multilayer Inductor

Size 0805 (Low  $R_{DC}$ )

| Electrical properties |                 |                   |                     |                     |                   |                  |                    |    |                                |      |
|-----------------------|-----------------|-------------------|---------------------|---------------------|-------------------|------------------|--------------------|----|--------------------------------|------|
|                       | Order Code      | L<br>±20%<br>(µH) | $I_R$ @ 20K<br>(mA) | $I_R$ @ 40K<br>(mA) | $I_{sat}$<br>(mA) | $R_{DC}$<br>(mΩ) | $f_{res}$<br>(MHz) | Q  | Test Condition<br>L/Q<br>(MHz) | Qty. |
| END OF LIFE           | 744 797 751 47  | 0.47              | 1100                | 1400                | 650               | 75               | 130                | 10 | 1                              | 3000 |
|                       | 744 797 751 47A | 0.47              | 1100                | 1400                | 1000              | 100              |                    | 10 |                                |      |
| NEW                   | 744 797 752 10A | 1.0               | 900                 | 1300                | 950               | 110              | 90                 | 18 |                                |      |
| END OF LIFE           | 744 797 752 10  | 1.0               | 800                 | 1100                | 700               | 100              | 100                | 10 |                                |      |
| NEW                   | 744 797 752 15  | 1.5               | 800                 | 1100                | 800               | 160              | 70                 | 20 |                                |      |
| NEW                   | 744 797 752 22A | 2.2               | 700                 | 1000                | 550               | 200              | 50                 | 23 |                                |      |
| END OF LIFE           | 744 797 752 22  | 2.2               | 500                 | 700                 | 500               | 230              | 70                 | 10 |                                |      |
| NEW                   | 744 797 752 33  | 3.3               | 700                 | 1000                | 280               | 200              | 30                 | 25 |                                |      |
| NEW                   | 744 797 773 10  | 10.0              | 450                 | 650                 | 125               | 500              | 25                 | 35 |                                |      |

$I_L$  referring to self-heating,  $I_{L30}$  referring to inductance loss of 30%  
End of life: Not for new designs

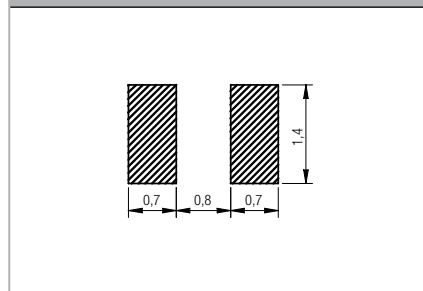


### Electrical properties

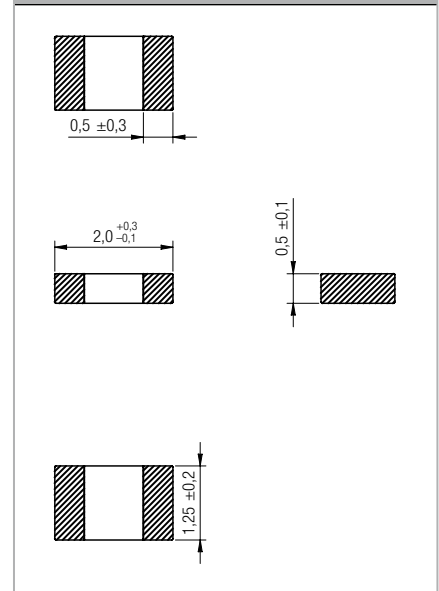
| Order Code     | L<br>±20%<br>(µH) | I <sub>R</sub> @ 20K<br>(mA) | I <sub>R</sub> @ 40K<br>(mA) | I <sub>sat</sub><br>(mA) | R <sub>DC</sub><br>(mΩ) | f <sub>res</sub><br>(MHz) | Q  | Test Condition<br>L/Q<br>(MHz) | Qty. |
|----------------|-------------------|------------------------------|------------------------------|--------------------------|-------------------------|---------------------------|----|--------------------------------|------|
| 744 797 741 47 | 0.47              | 1000                         | 1300                         | 700                      | 120                     | 130                       | 8  | 1                              | 5000 |
| 744 797 742 10 | 1.0               | 800                          | 1100                         | 500                      | 190                     | 100                       | 12 |                                |      |
| 744 797 742 15 | 1.5               | 600                          | 800                          | 300                      | 260                     | 70                        | 15 |                                |      |
| 744 797 742 22 | 2.2               | 500                          | 700                          | 200                      | 340                     | 40                        | 15 |                                |      |

I<sub>s</sub> referring to self-heating, I<sub>30%</sub> referring to inductance loss of 30%

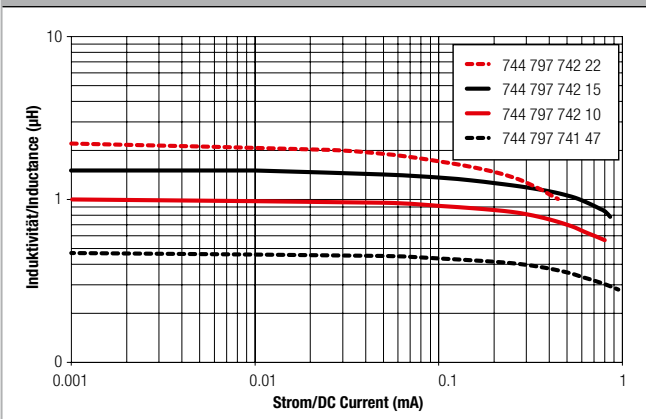
### Land pattern (in mm)



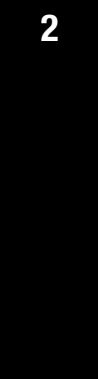
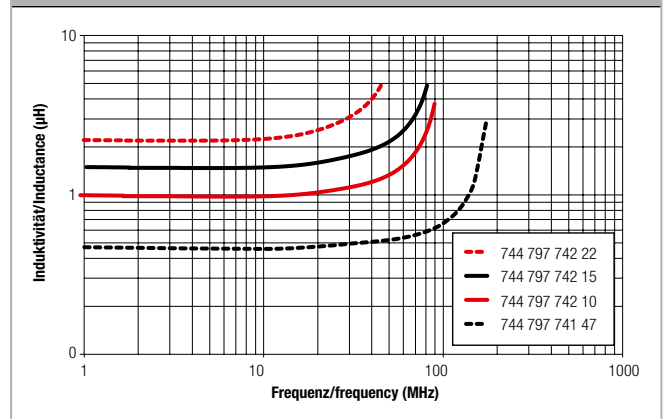
### Dimensions (in mm)



### Inductance vs. Current



### Inductance vs. Frequency

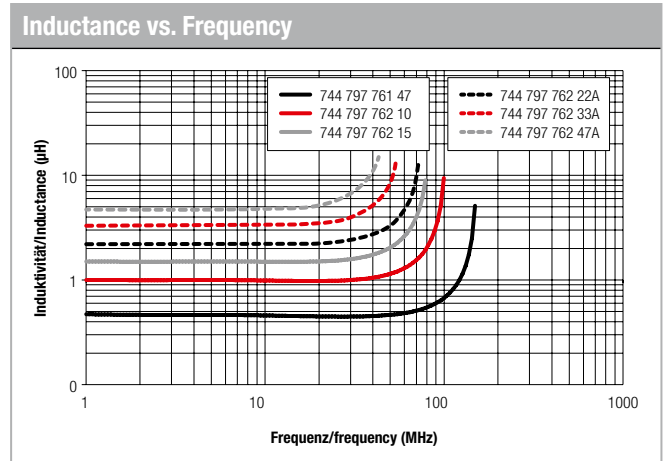
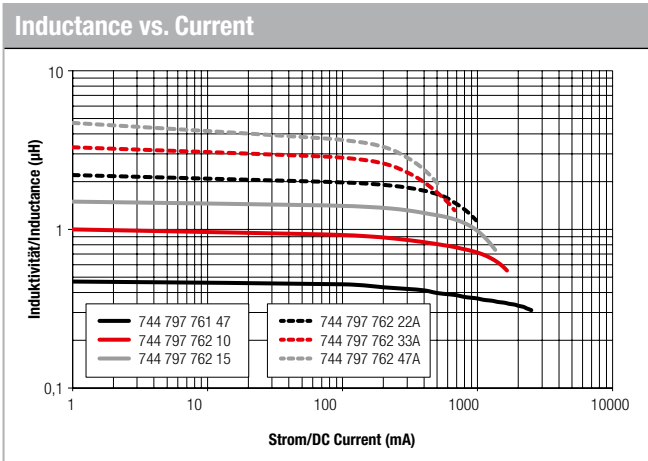
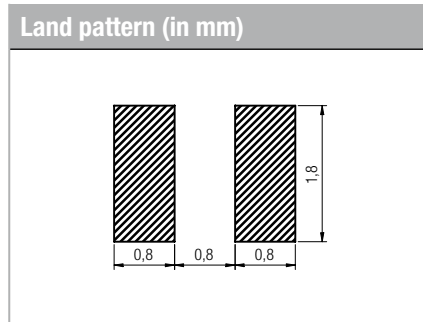
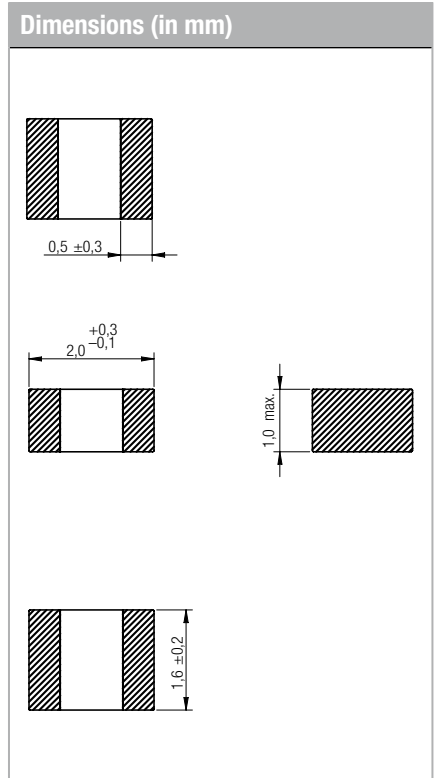


## Power Multilayer Inductor

Size 0806

| Electrical properties |                 |                   |                              |                              |                          |                         |                           |    |                                |      |
|-----------------------|-----------------|-------------------|------------------------------|------------------------------|--------------------------|-------------------------|---------------------------|----|--------------------------------|------|
|                       | Order Code      | L<br>±20%<br>(µH) | I <sub>r</sub> @ 20K<br>(mA) | I <sub>r</sub> @ 40K<br>(mA) | I <sub>sat</sub><br>(mA) | R <sub>DC</sub><br>(mΩ) | f <sub>res</sub><br>(MHz) | Q  | Test Condition<br>L/Q<br>(MHz) | Qty. |
| NEW                   | 744 797 761 47  | 0.47              | 1100                         | 1600                         | 1900                     | 80                      | 120                       | 10 | 1                              | 3000 |
| NEW                   | 744 797 762 10  | 1.0               | 1000                         | 1400                         | 1000                     | 90                      | 50                        | 18 |                                |      |
| NEW                   | 744 797 762 15  | 1.5               | 900                          | 1300                         | 800                      | 110                     | 60                        | 18 |                                |      |
| END OF LIFE           | 744 797 762 22  | 2.2               | 900                          | 1200                         | 400                      | 110                     | 75                        | 10 |                                |      |
| NEW                   | 744 797 762 22A | 2.2               | 900                          | 1300                         | 560                      | 110                     | 50                        | 22 |                                |      |
| END OF LIFE           | 744 797 762 33  | 3.3               | 800                          | 1100                         | 300                      | 130                     | 60                        | 10 |                                |      |
| NEW                   | 744 797 762 33A | 3.3               | 850                          | 1250                         | 330                      | 120                     | 40                        | 22 |                                |      |
| END OF LIFE           | 744 797 762 47  | 4.7               | 700                          | 1000                         | 140                      | 160                     | 45                        | 10 |                                |      |
| NEW                   | 744 797 762 47A | 4.7               | 800                          | 1200                         | 200                      | 140                     | 30                        | 22 |                                |      |

I<sub>s</sub> referring to self-heating, I<sub>s</sub> referring to inductance loss of 30%  
End of life: Not for new designs

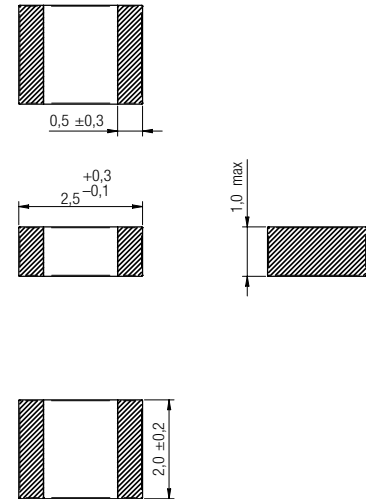


#### Electrical properties

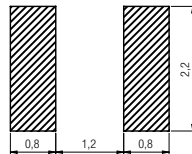
|             | Order Code             | L<br>±20%<br>( $\mu$ H) | $I_R$ @ 20K<br>(mA) | $I_R$ @ 40K<br>(mA) | $I_{sat}$<br>(mA) | $R_{DC}$<br>(m $\Omega$ ) | $f_{res}$<br>(MHz) | Q  | Test Condition<br>L/Q<br>(MHz) | Qty. |
|-------------|------------------------|-------------------------|---------------------|---------------------|-------------------|---------------------------|--------------------|----|--------------------------------|------|
| END OF LIFE | <b>744 797 871 47A</b> | 0.47                    | 1400                | 1800                | 980               | 40                        | 110                | 15 | 1                              | 3000 |
| NEW         | <b>744 797 871 47B</b> | 0.47                    | 2000                | 2700                | 950               | 40                        | 105                | 18 |                                |      |
| END OF LIFE | <b>744 797 872 10A</b> | 1.0                     | 1300                | 1700                | 900               | 55                        | 90                 | 15 |                                |      |
| NEW         | <b>744 797 872 10B</b> | 1.0                     | 1450                | 1950                | 1150              | 60                        | 75                 | 23 |                                |      |
| END OF LIFE | <b>744 797 872 15</b>  | 1.5                     | 1200                | 1600                | 800               | 70                        | 70                 | 15 |                                |      |
| NEW         | <b>744 797 872 15A</b> | 1.5                     | 1400                | 1900                | 1100              | 70                        | 65                 | 25 |                                |      |
| END OF LIFE | <b>744 797 872 22</b>  | 2.2                     | 1100                | 1500                | 700               | 80                        | 60                 | 15 |                                |      |
| NEW         | <b>744 797 872 22A</b> | 2.2                     | 1300                | 1800                | 700               | 85                        | 55                 | 25 |                                |      |
| END OF LIFE | <b>744 797 872 33</b>  | 3.3                     | 950                 | 1350                | 400               | 100                       | 50                 | 20 |                                |      |
| NEW         | <b>744 797 872 33A</b> | 3.3                     | 1100                | 1600                | 400               | 100                       | 35                 | 25 |                                |      |
| END OF LIFE | <b>744 797 872 47</b>  | 4.7                     | 850                 | 1250                | 250               | 110                       | 40                 | 20 |                                |      |
| NEW         | <b>744 797 872 47A</b> | 4.7                     | 1000                | 1500                | 270               | 110                       | 25                 | 32 |                                |      |

$I_R$  referring to self-heating,  $I_{30}$  referring to inductance loss of 30%  
End of life: Not for new designs

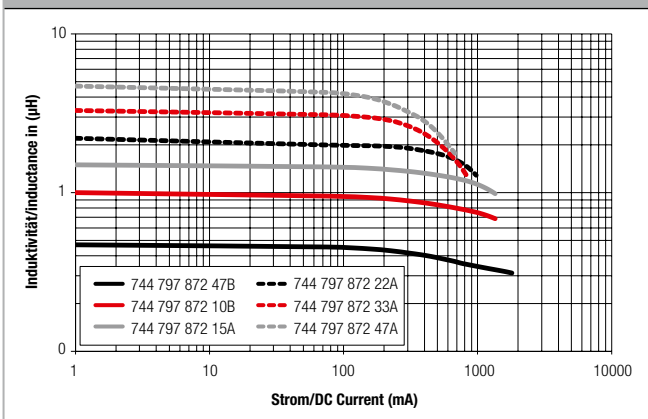
#### Dimensions (in mm)



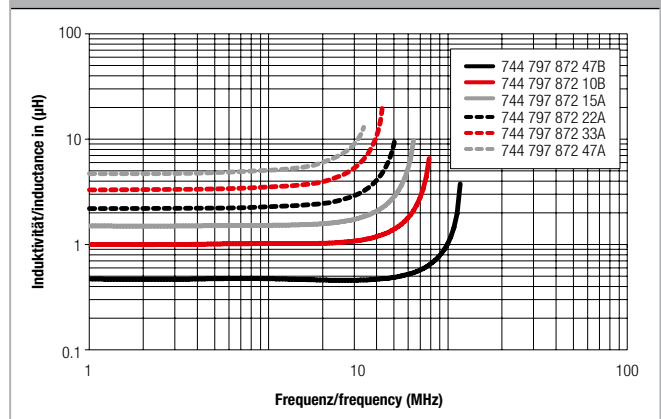
#### Land pattern (in mm)



#### Inductance vs. Current



#### Inductance vs. Frequency



## Power Multilayer Inductor

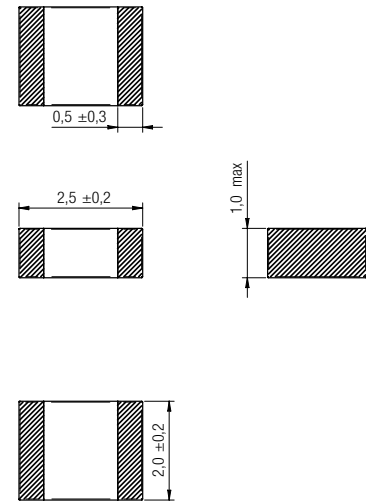
Size 1008 (High Saturation Current)

### Electrical properties

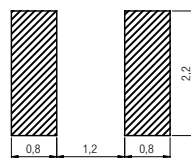
| Order Code     | L<br>±20%<br>(μH) | I <sub>R</sub> @ 20K<br>(mA) | I <sub>R</sub> @ 40K<br>(mA) | I <sub>sat</sub><br>(mA) | R <sub>DC</sub><br>(mΩ) | f <sub>res</sub><br>(MHz) | Q  | Test Condition<br>L/Q<br>(MHz) | Qty. |
|----------------|-------------------|------------------------------|------------------------------|--------------------------|-------------------------|---------------------------|----|--------------------------------|------|
| 744 798 872 10 | 1.0               | 600                          | 1000                         | 1200                     | 290                     | 100                       | 15 | 1                              | 3000 |
| 744 798 872 22 | 2.2               | 550                          | 850                          | 1100                     | 400                     | 70                        | 19 |                                |      |
| 744 798 872 47 | 4.7               | 450                          | 750                          | 850                      | 530                     | 50                        | 26 |                                |      |
| 744 798 872 68 | 6.8               | 350                          | 700                          | 600                      | 650                     | 40                        | 30 |                                |      |
| 744 798 873 10 | 10                | 300                          | 500                          | 350                      | 700                     | 30                        | 35 |                                |      |

I<sub>s</sub> referring to self-heating, I<sub>u</sub> referring to inductance loss of 30%

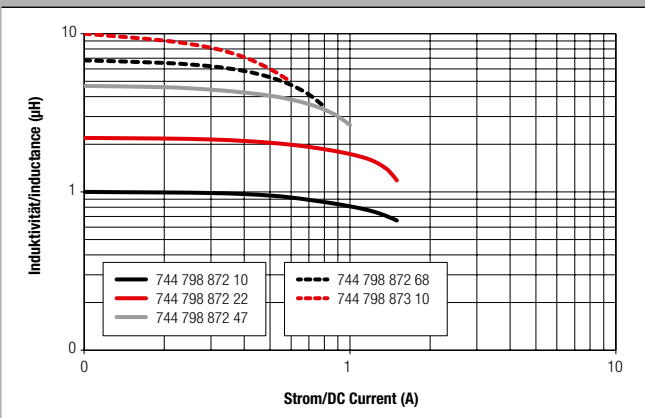
### Dimensions (in mm)



### Land pattern (in mm)



### Inductance vs. Current



### Inductance vs. Frequency

