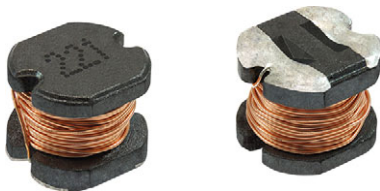




## Ferrite Power Inductor, Drumcore



### FEATURES

- 5.8 mm x 5.2 mm x 4.5 mm size
- Ferrite drumcore construction, unshielded
- Inductance range 1  $\mu$ H to 680  $\mu$ H
- Material categorization:  
for definitions of compliance please see  
[www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

### LINKS TO ADDITIONAL RESOURCES



Product Page

### APPLICATIONS

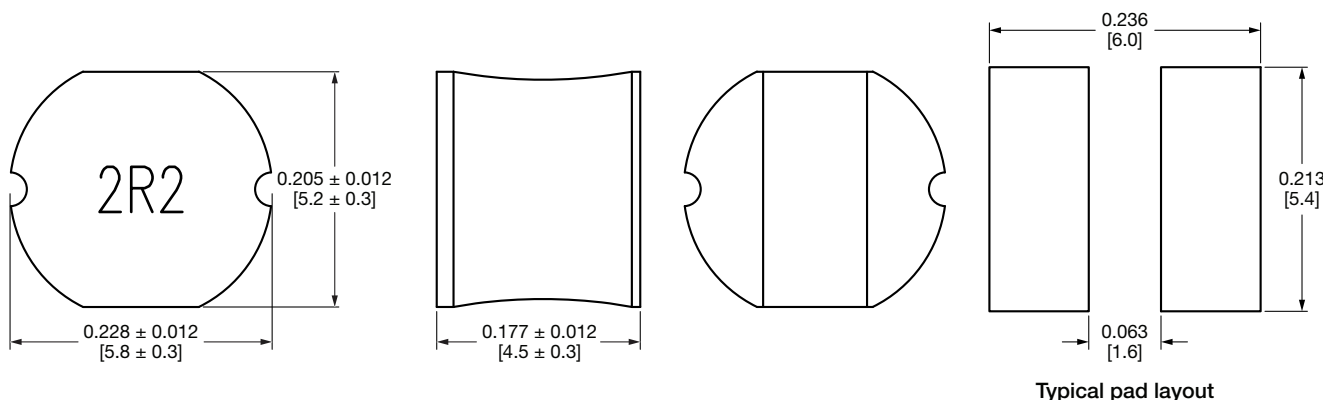
- DC/DC power supplies
- Noise suppression and filtering

### STANDARD ELECTRICAL SPECIFICATIONS

| PART NUMBER      | L <sub>0</sub> INDUCTANCE<br>( $\mu$ H) | INDUCTANCE<br>TOLERANCE<br>(%) | DCR MAX.<br>(m $\Omega$ ) | HEAT RATING CURRENT<br>DC TYP.<br>(A) <sup>(1)</sup> |
|------------------|-----------------------------------------|--------------------------------|---------------------------|------------------------------------------------------|
| IDCP2218ER1R0M01 | 1                                       | 20                             | 20                        | 4.00                                                 |
| IDCP2218ER1R5M01 | 1.5                                     | 20                             | 25                        | 3.80                                                 |
| IDCP2218ER2R2M01 | 2.2                                     | 20                             | 27                        | 3.50                                                 |
| IDCP2218ER2R7M01 | 2.7                                     | 20                             | 30                        | 3.20                                                 |
| IDCP2218ER3R3M01 | 3.3                                     | 20                             | 34                        | 3.00                                                 |
| IDCP2218ER4R7M01 | 4.7                                     | 20                             | 40                        | 2.80                                                 |
| IDCP2218ER6R8M01 | 6.8                                     | 20                             | 80                        | 2.50                                                 |
| IDCP2218ER8R2M01 | 8.2                                     | 20                             | 90                        | 2.10                                                 |
| IDCP2218ER100M01 | 10                                      | 20                             | 100                       | 1.50                                                 |
| IDCP2218ER120M01 | 12                                      | 20                             | 120                       | 1.40                                                 |
| IDCP2218ER150M01 | 15                                      | 20                             | 140                       | 1.30                                                 |
| IDCP2218ER180M01 | 18                                      | 20                             | 150                       | 1.23                                                 |
| IDCP2218ER220M01 | 22                                      | 20                             | 180                       | 1.11                                                 |
| IDCP2218ER270M01 | 27                                      | 20                             | 200                       | 0.97                                                 |
| IDCP2218ER330M01 | 33                                      | 20                             | 230                       | 0.88                                                 |
| IDCP2218ER390M01 | 39                                      | 20                             | 320                       | 0.80                                                 |
| IDCP2218ER470M01 | 47                                      | 20                             | 370                       | 0.72                                                 |
| IDCP2218ER560M01 | 56                                      | 20                             | 420                       | 0.68                                                 |
| IDCP2218ER680M01 | 68                                      | 20                             | 460                       | 0.61                                                 |
| IDCP2218ER820M01 | 82                                      | 20                             | 600                       | 0.58                                                 |
| IDCP2218ER101M01 | 100                                     | 20                             | 700                       | 0.52                                                 |
| IDCP2218ER121M01 | 120                                     | 20                             | 930                       | 0.48                                                 |
| IDCP2218ER151M01 | 150                                     | 20                             | 1100                      | 0.40                                                 |
| IDCP2218ER181M01 | 180                                     | 20                             | 1380                      | 0.38                                                 |
| IDCP2218ER221M01 | 220                                     | 20                             | 1570                      | 0.35                                                 |
| IDCP2218ER221K01 | 220                                     | 10                             | 1570                      | 0.35                                                 |
| IDCP2218ER271K01 | 270                                     | 10                             | 1500                      | 0.25                                                 |
| IDCP2218ER331K01 | 330                                     | 10                             | 3000                      | 0.22                                                 |
| IDCP2218ER391K01 | 390                                     | 10                             | 3500                      | 0.20                                                 |
| IDCP2218ER471K01 | 470                                     | 10                             | 4000                      | 0.19                                                 |
| IDCP2218ER561K01 | 560                                     | 10                             | 4000                      | 0.18                                                 |
| IDCP2218ER681K01 | 680                                     | 10                             | 4500                      | 0.15                                                 |

#### Notes

- All test data is referenced to 25 °C ambient
  - Operating temperature is -40 °C to +105 °C
  - Test condition: 100 kHz, 0.3 V for 8.2  $\mu$ H and below, and 1 kHz, 0.3 V for 10  $\mu$ H and above
  - Storage condition: -40 °C to +105 °C (on board); and -10 °C to +40 °C and < 70 % RH (in component packaging)
  - Resistance to solder heat: 255 °C for 10 s (2 times max. through reflow)
- <sup>(1)</sup> DC current (A) that will cause an approximate  $\Delta$ T of 40 °C or cause L<sub>0</sub> to drop by 25 %, whichever is lower

**DIMENSIONS** in inches [millimeters]

**DESCRIPTION**
**IDCP2218-01**

MODEL

**2.2  $\mu$ H**

INDUCTANCE VALUE

 **$\pm 20 \%$** 

INDUCTANCE TOLERANCE

**ER**

PACKAGE CODE

**GLOBAL PART NUMBER**

|                |                |                              |                          |                                                  |            |
|----------------|----------------|------------------------------|--------------------------|--------------------------------------------------|------------|
| <b>I D C P</b> | <b>2 2 1 8</b> | <b>E R</b>                   | <b>2 R 2</b>             | <b>M</b>                                         | <b>0 1</b> |
| PRODUCT FAMILY | SIZE           | PACKAGE CODE                 | INDUCTANCE VALUE         | INDUCTANCE TOLERANCE                             | SERIES     |
|                |                | <b>ER</b> =<br>tape and reel | <b>2R2</b> = 2.2 $\mu$ H | <b>M</b> = $\pm 20 \%$<br><b>N</b> = $\pm 30 \%$ |            |



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