

# EMC Components

## HF Series

Common-Mode Choke Coils for AC Power Supply  
Closed Magnetic Circuit, High Impedance

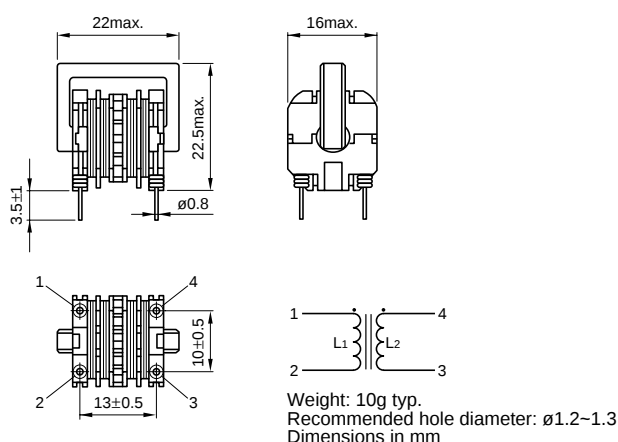
### FEATURES

Comprising double-square closed magnetic circuit ferrite cores and windings on partitioned bobbins, these common-mode choke coils are useful for noise suppression. With the small size and high impedance that the use of closed magnetic circuit cores enables, their benefits include compactness, high impedance at high frequencies, and minimal flux leakage.



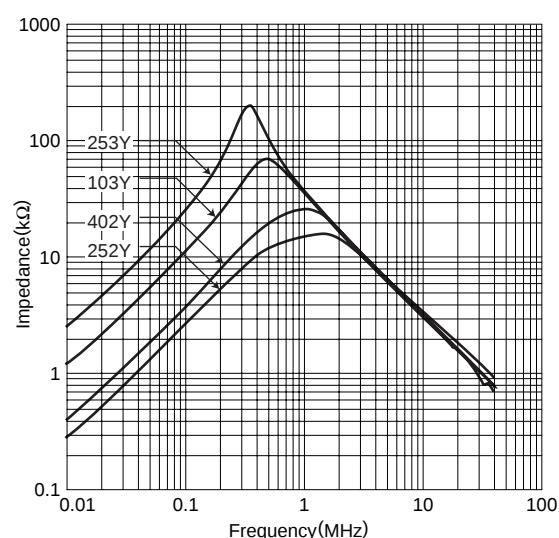
### HF2022R TYPE

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



### TYPICAL ELECTRICAL CHARACTERISTICS

#### IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### ELECTRICAL CHARACTERISTICS

| Part No.           | Inductance (mH)min. | L1-L2 inductance difference ( $\mu$ H)max. | DC resistance ( $\Omega$ )max. | Rated current Iac (A)max. |
|--------------------|---------------------|--------------------------------------------|--------------------------------|---------------------------|
| HF2022R-333Y0R3-01 | 33                  | 700                                        | 4.2                            | 0.3                       |
| HF2022R-253Y0R4-01 | 25                  | 500                                        | 2.9                            | 0.4                       |
| HF2022R-183Y0R5-01 | 18                  | 350                                        | 2                              | 0.5                       |
| HF2022R-103Y0R7-01 | 10                  | 200                                        | 1.1                            | 0.7                       |
| HF2022R-682Y0R8-01 | 6.8                 | 150                                        | 0.9                            | 0.8                       |
| HF2022R-402Y1R0-01 | 4                   | 100                                        | 0.5                            | 1                         |
| HF2022R-252Y1R3-01 | 2.5                 | 50                                         | 0.3                            | 1.3                       |
| HF2022R-202Y1R5-01 | 2                   | 50                                         | 0.2                            | 1.5                       |
| HF2022R-102Y2R0-01 | 1                   | 50                                         | 0.2                            | 2                         |

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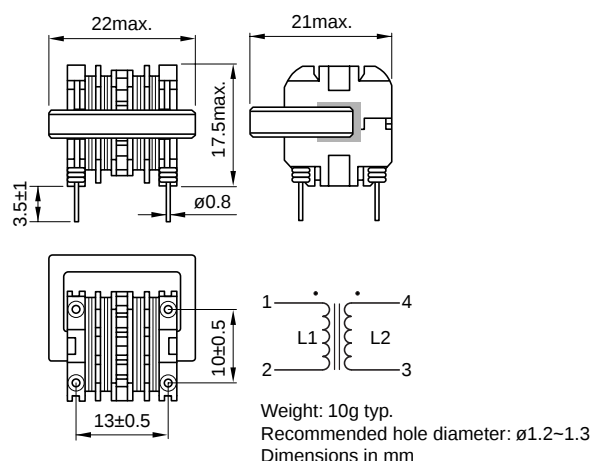
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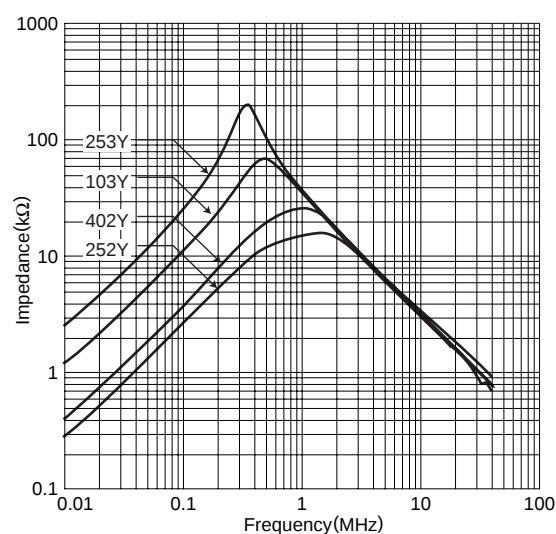
### HF2018R TYPE

These coils incorporate square closed magnetic circuit ferrite cores and windings on partitioned bobbins to provide compactness, high impedance, and other benefits.

### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### ELECTRICAL CHARACTERISTICS

| Part No.           | Inductance (mH)min. | L1-L2 inductance difference (μH)max. | DC resistance (Ω)max. | Rated current Iac (A)max. |
|--------------------|---------------------|--------------------------------------|-----------------------|---------------------------|
| HF2018R-333Y0R3-01 | 33                  | 700                                  | 4.2                   | 0.3                       |
| HF2018R-253Y0R4-01 | 25                  | 500                                  | 2.9                   | 0.4                       |
| HF2018R-183Y0R5-01 | 18                  | 350                                  | 2                     | 0.5                       |
| HF2018R-103Y0R7-01 | 10                  | 200                                  | 1.1                   | 0.7                       |
| HF2018R-682Y0R8-01 | 6.8                 | 150                                  | 0.9                   | 0.8                       |
| HF2018R-402Y1R0-01 | 4                   | 100                                  | 0.5                   | 1                         |
| HF2018R-252Y1R3-01 | 2.5                 | 50                                   | 0.3                   | 1.3                       |
| HF2018R-202Y1R5-01 | 2                   | 50                                   | 0.2                   | 1.5                       |
| HF2018R-102Y2R0-01 | 1                   | 50                                   | 0.2                   | 2                         |

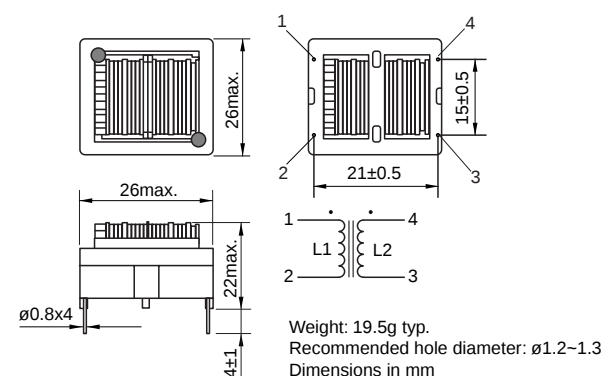
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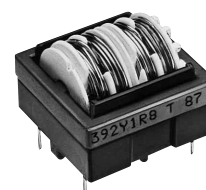
### HF2422 TYPE

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM

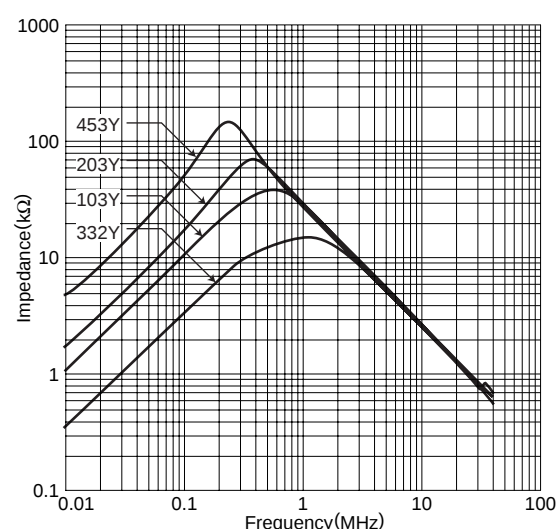


#### ELECTRICAL CHARACTERISTICS

| Part No.           | Inductance (mH)min. | L1-L2 inductance difference ( $\mu$ H)max. | DC resistance ( $\Omega$ )max. | Rated current Iac (A)max. |
|--------------------|---------------------|--------------------------------------------|--------------------------------|---------------------------|
| HF2422-683Y0R4-T01 | 68                  | 700                                        | 2.3                            | 0.4                       |
| HF2422-453Y0R5-T01 | 45                  | 600                                        | 1.65                           | 0.5                       |
| HF2422-333Y0R6-T01 | 33                  | 500                                        | 1.2                            | 0.6                       |
| HF2422-253Y0R8-T01 | 25                  | 400                                        | 0.88                           | 0.8                       |
| HF2422-203Y1R0-T01 | 20                  | 350                                        | 0.64                           | 1                         |
| HF2422-103Y1R2-T01 | 10                  | 250                                        | 0.38                           | 1.2                       |
| HF2422-452Y1R5-T01 | 4.5                 | 150                                        | 0.19                           | 1.5                       |
| HF2422-392Y1R8-T01 | 3.9                 | 150                                        | 0.15                           | 1.8                       |
| HF2422-332Y2R0-T01 | 3.3                 | 100                                        | 0.11                           | 2                         |
| HF2422-242Y2R5-T01 | 2.4                 | 90                                         | 0.09                           | 2.5                       |

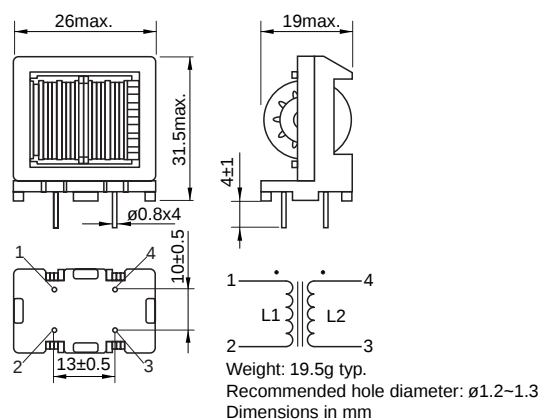


#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### HF2430 TYPE

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM

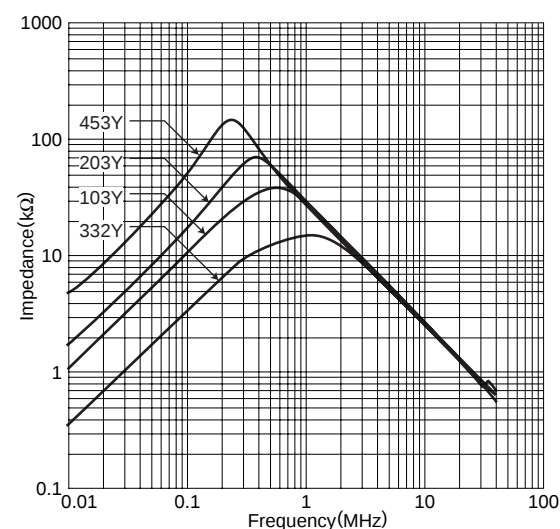


#### ELECTRICAL CHARACTERISTICS

| Part No.           | Inductance (mH)min. | L1-L2 inductance difference ( $\mu$ H)max. | DC resistance ( $\Omega$ )max. | Rated current Iac (A)max. |
|--------------------|---------------------|--------------------------------------------|--------------------------------|---------------------------|
| HF2430-683Y0R4-T01 | 68                  | 700                                        | 2.3                            | 0.4                       |
| HF2430-453Y0R5-T01 | 45                  | 600                                        | 1.65                           | 0.5                       |
| HF2430-333Y0R6-T01 | 33                  | 500                                        | 1.2                            | 0.6                       |
| HF2430-253Y0R8-T01 | 25                  | 400                                        | 0.88                           | 0.8                       |
| HF2430-203Y1R0-T01 | 20                  | 350                                        | 0.64                           | 1                         |
| HF2430-103Y1R2-T01 | 10                  | 250                                        | 0.38                           | 1.2                       |
| HF2430-452Y1R5-T01 | 4.5                 | 150                                        | 0.19                           | 1.5                       |
| HF2430-392Y1R8-T01 | 3.9                 | 150                                        | 0.15                           | 1.8                       |
| HF2430-332Y2R0-T01 | 3.3                 | 100                                        | 0.11                           | 2                         |
| HF2430-242Y2R5-T01 | 2.4                 | 90                                         | 0.09                           | 2.5                       |



#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



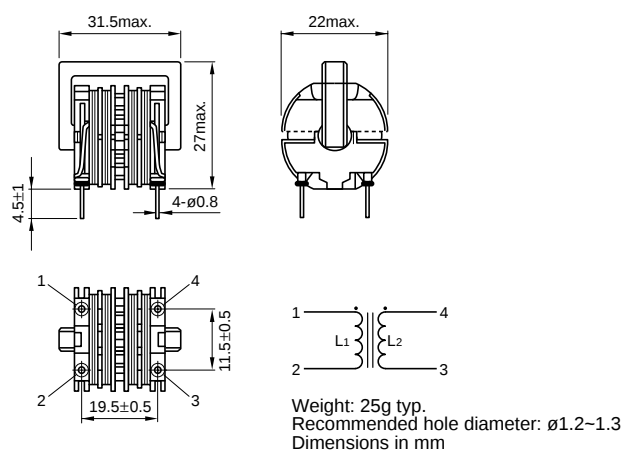
# EMC Components

## HF Series

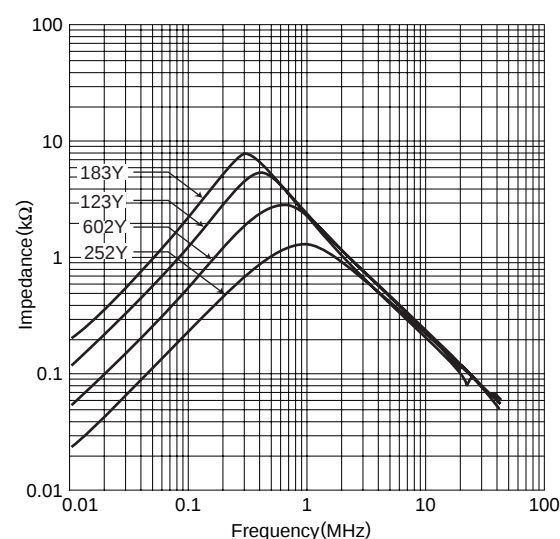
Common-Mode Choke Coils for AC Power Supply  
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### HF2827 TYPE

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

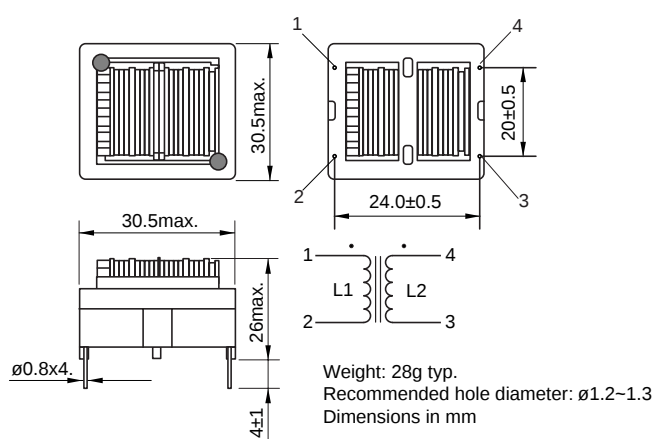


#### ELECTRICAL CHARACTERISTICS

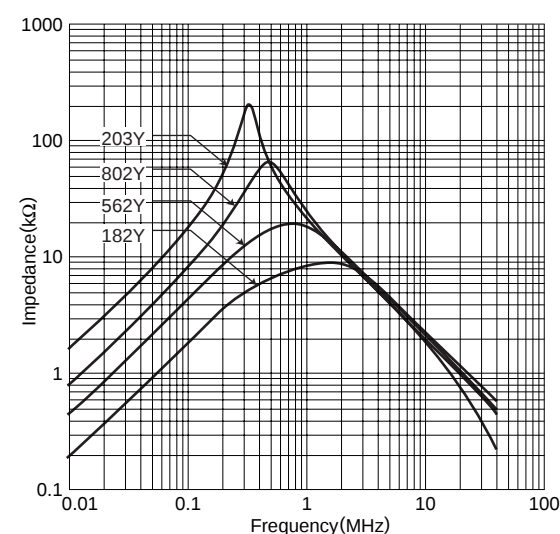
| Part No.          | Inductance (mH)min. | L1-L2 inductance difference (μH)max. | DC resistance (Ω)max. | Rated current Iac (A)max. |
|-------------------|---------------------|--------------------------------------|-----------------------|---------------------------|
| HF2827-303Y0R9-01 | 30                  | 600                                  | 0.8                   | 0.9                       |
| HF2827-183Y1R0-01 | 18                  | 500                                  | 0.5                   | 1                         |
| HF2827-123Y1R5-01 | 12                  | 350                                  | 0.4                   | 1.5                       |
| HF2827-602Y2R0-01 | 6                   | 200                                  | 0.16                  | 2                         |
| HF2827-442Y2R5-01 | 4.4                 | 150                                  | 0.12                  | 2.5                       |
| HF2827-252Y3R0-01 | 2.5                 | 100                                  | 0.1                   | 3                         |

### HF2826 TYPE

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



#### ELECTRICAL CHARACTERISTICS

| Part No.           | Inductance (mH)min. | L1-L2 inductance difference (μH)max. | DC resistance (Ω)max. | Rated current Iac (A)max. |
|--------------------|---------------------|--------------------------------------|-----------------------|---------------------------|
| HF2826-353Y1R0-T01 | 35                  | 650                                  | 0.78                  | 1                         |
| HF2826-253Y1R2-T01 | 25                  | 500                                  | 0.56                  | 1.2                       |
| HF2826-203Y1R5-T01 | 20                  | 400                                  | 0.41                  | 1.5                       |
| HF2826-123Y1R8-T01 | 12                  | 300                                  | 0.27                  | 1.8                       |
| HF2826-802Y2R0-T01 | 8                   | 200                                  | 0.18                  | 2                         |
| HF2826-562Y2R5-T01 | 5.6                 | 150                                  | 0.13                  | 2.5                       |
| HF2826-472Y2R8-T01 | 4.7                 | 150                                  | 0.1                   | 2.8                       |
| HF2826-332Y3R0-T01 | 3.3                 | 100                                  | 0.088                 | 3                         |
| HF2826-182Y4R0-T01 | 1.8                 | 40                                   | 0.05                  | 4                         |

⚠ Specifications which provide more details for the proper and safe use of the described product are available upon request.

All specifications are subject to change without notice.

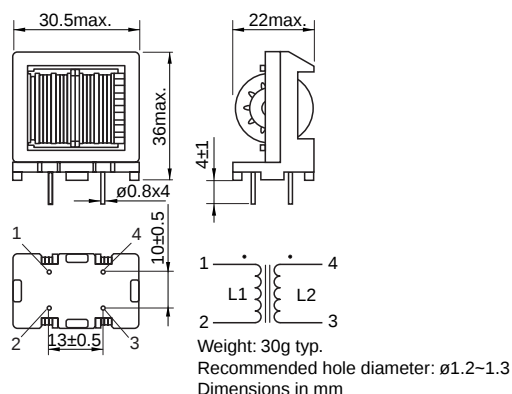
# EMC Components

## HF Series

Common-Mode Choke Coils for AC Power Supply  
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### HF2836 TYPE

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM

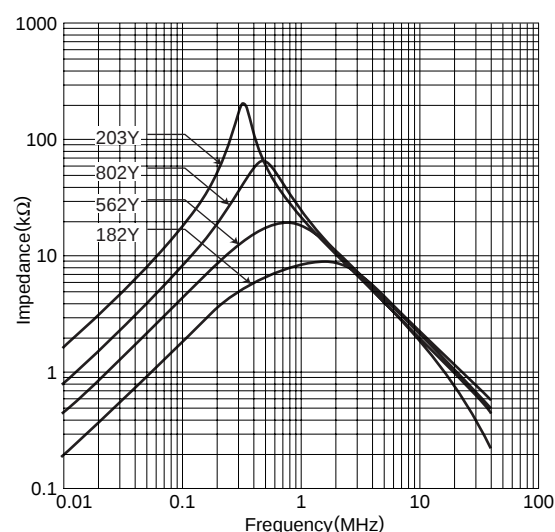


#### ELECTRICAL CHARACTERISTICS

| Part No.           | Inductance (mH)min. | L1-L2 inductance difference ( $\mu$ H)max. | DC resistance ( $\Omega$ )max. | Rated current Iac (A)max. |
|--------------------|---------------------|--------------------------------------------|--------------------------------|---------------------------|
| HF2836-353Y1R0-T01 | 35                  | 650                                        | 0.78                           | 1                         |
| HF2836-253Y1R2-T01 | 25                  | 500                                        | 0.56                           | 1.2                       |
| HF2836-203Y1R5-T01 | 20                  | 400                                        | 0.41                           | 1.5                       |
| HF2836-123Y1R8-T01 | 12                  | 300                                        | 0.27                           | 1.8                       |
| HF2836-802Y2R0-T01 | 8                   | 200                                        | 0.18                           | 2                         |
| HF2836-562Y2R5-T01 | 5.6                 | 150                                        | 0.13                           | 2.5                       |
| HF2836-472Y2R8-T01 | 4.7                 | 150                                        | 0.1                            | 2.8                       |
| HF2836-332Y3R0-T01 | 3.3                 | 100                                        | 0.088                          | 3                         |
| HF2836-182Y4R0-T01 | 1.8                 | 40                                         | 0.05                           | 4                         |

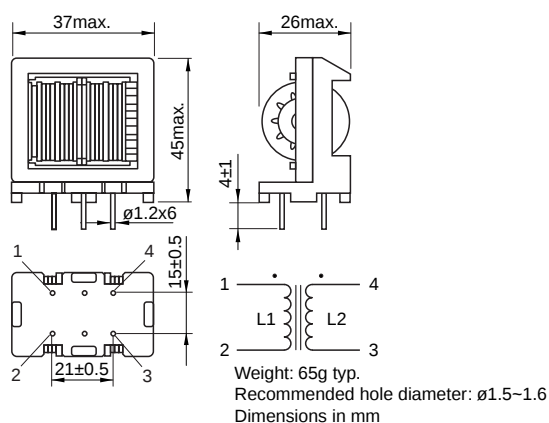


#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS



### HF3545 TYPE

#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



#### ELECTRICAL CHARACTERISTICS

| Part No.           | Inductance (mH)min. | L1-L2 inductance difference ( $\mu$ H)max. | DC resistance ( $\Omega$ )max. | Rated current Iac (A)max. |
|--------------------|---------------------|--------------------------------------------|--------------------------------|---------------------------|
| HF3545-333Y1R5-T01 | 33                  | 900                                        | 0.42                           | 1.5                       |
| HF3545-223Y1R8-T01 | 22                  | 700                                        | 0.29                           | 1.8                       |
| HF3545-183Y2R0-T01 | 18                  | 500                                        | 0.23                           | 2                         |
| HF3545-153Y2R2-T01 | 15                  | 450                                        | 0.21                           | 2.2                       |
| HF3545-123Y2R5-T01 | 12                  | 350                                        | 0.17                           | 2.5                       |
| HF3545-103Y2R7-T01 | 10                  | 300                                        | 0.13                           | 2.7                       |
| HF3545-822Y3R0-T01 | 8.2                 | 300                                        | 0.105                          | 3                         |
| HF3545-562Y3R5-T01 | 5.6                 | 250                                        | 0.077                          | 3.5                       |
| HF3545-472Y4R0-T01 | 4.7                 | 200                                        | 0.062                          | 4                         |



#### TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS

