

# SMT COMMON MODE CHOKES

## STRF01 SERIES

### FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI prformance
- Meets UL94V-0 flammability standard

### APPLICATIONS:

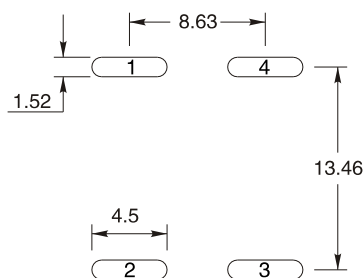
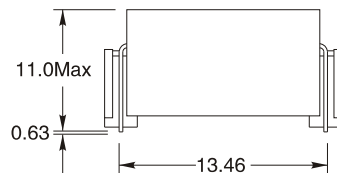
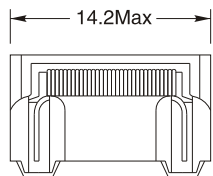
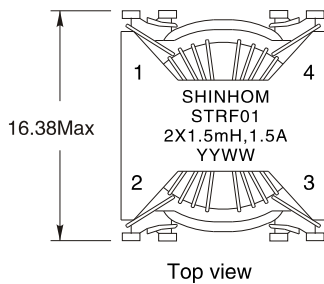
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies



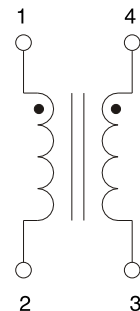
### ELECTRICAL CHARACTERISTICS:

| Part Number | L(0A)<br>(uH)Min<br>10KHz,0.1V | IDC<br>(A)Max | DCR<br>(mΩ)Max | Hi-Pot<br>1mA/2S/60Hz<br>(Vac) |
|-------------|--------------------------------|---------------|----------------|--------------------------------|
| STRF01-651Y | 650                            | 3.6           | 50             | 1000                           |
| STRF01-801Y | 800                            | 1.5           | 60             | 1000                           |
| STRF01-152Y | 1500                           | 1.5           | 60             | 1000                           |
| STRF01-602Y | 6000                           | 1.0           | 450            | 1000                           |
| STRF01-153Y | 15000                          | 1.0           | 600            | 1000                           |

### PHYSICAL CHARACTERISTICS & WINDING



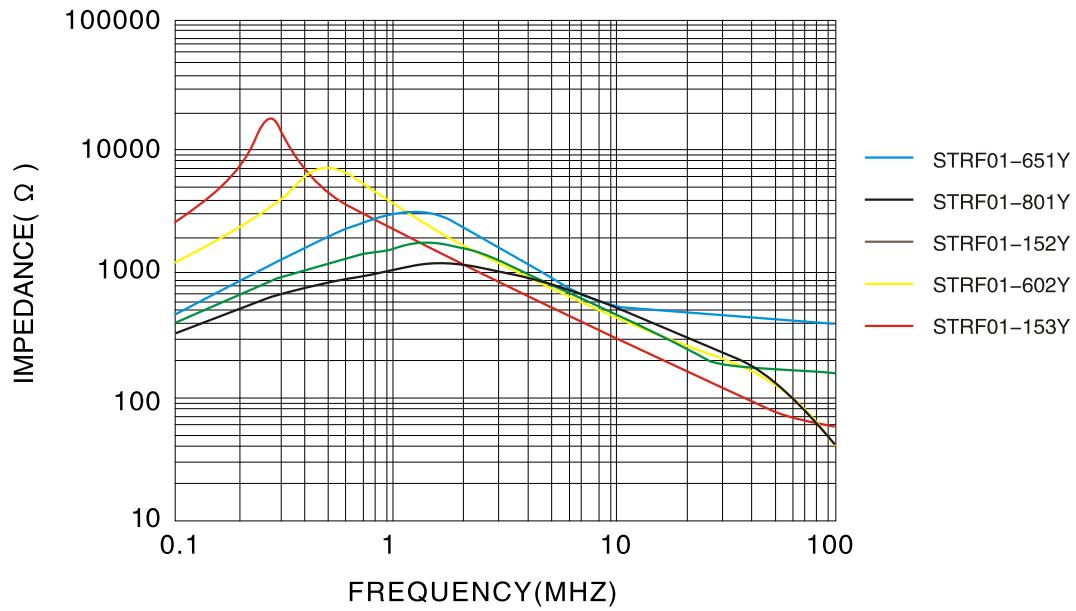
Pad layout



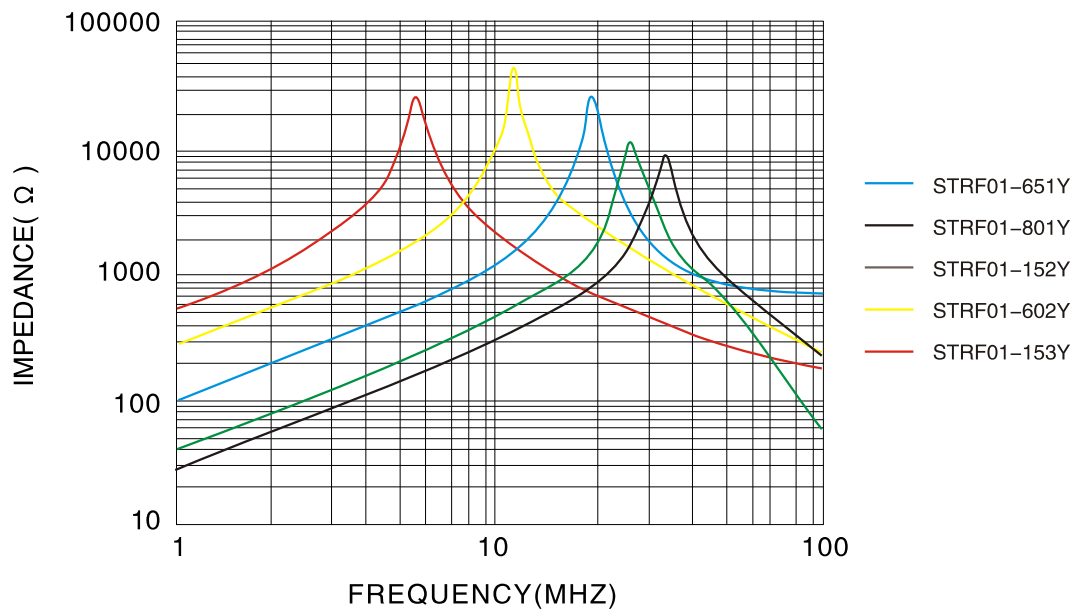
### NOTES:

Temperature Rise .....40℃ typical at IDC  
 Operating Temperature .....-40℃ to +125℃(Including self temperature rise)  
 Storage Temperature .....-40℃ to +125℃  
 Soldering .....245℃, 5 seconds max  
 Dielectric Strength .....1000 Vrms between windings

## IMPEDANCE COMMON MODE



## IMPEDANCE DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

## STRF012 SERIES

### FEATURES:

- SMD Power line choke
- Compact size
- Toroidal core with sector winding
- High attenuation of common mode interferences in low and middle frequency range

### APPLICATIONS:

- Power electronics
- SMPS
- Mains filter

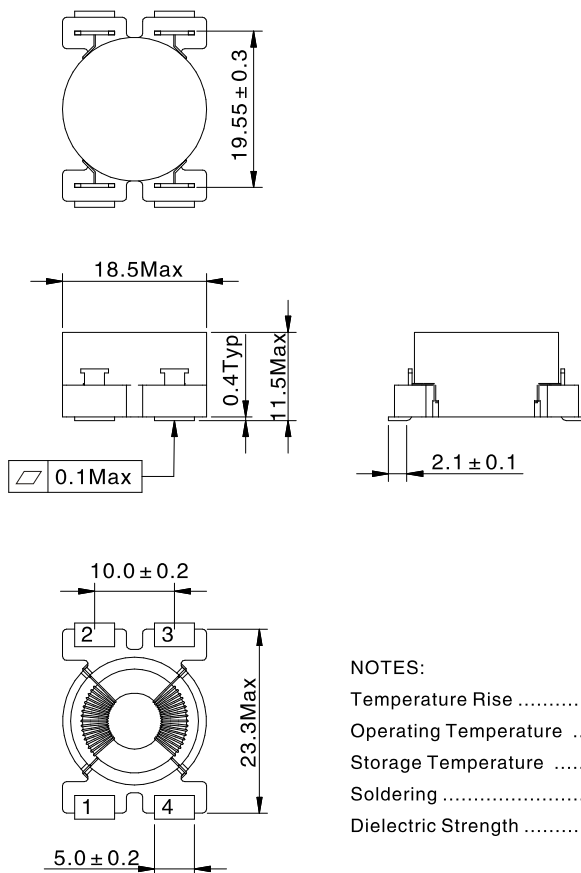


### ELECTRICAL CHARACTERISTICS:

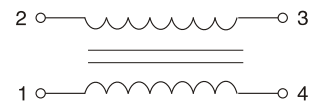
| Part Number  | L (mH) | Tolerance (%) | Rated Current (A) | RDC max. (Ω) |
|--------------|--------|---------------|-------------------|--------------|
| STRF012-701N | 0.7    | ± 30          | 4.0               | 0.03         |
| STRF012-102N | 1.0    |               | 2.0               | 0.06         |
| STRF012-222N | 2.2    |               | 2.0               | 0.10         |
| STRF012-332N | 3.3    |               | 1.5               | 0.15         |
| STRF012-682N | 6.8    |               | 1.0               | 0.30         |
| STRF012-103N | 10     |               | 0.7               | 0.55         |
| STRF012-273N | 27     |               | 0.4               | 1.20         |
| STRF012-393N | 39     |               | 0.4               | 1.70         |
| STRF012-473N | 47     |               | 0.3               | 2.60         |

### PHYSICAL CHARACTERISTICS:

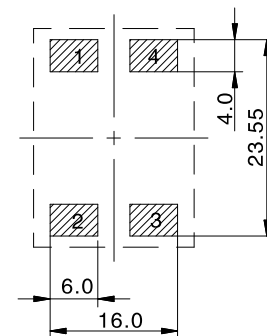
#### Dimensions 1



#### Winding



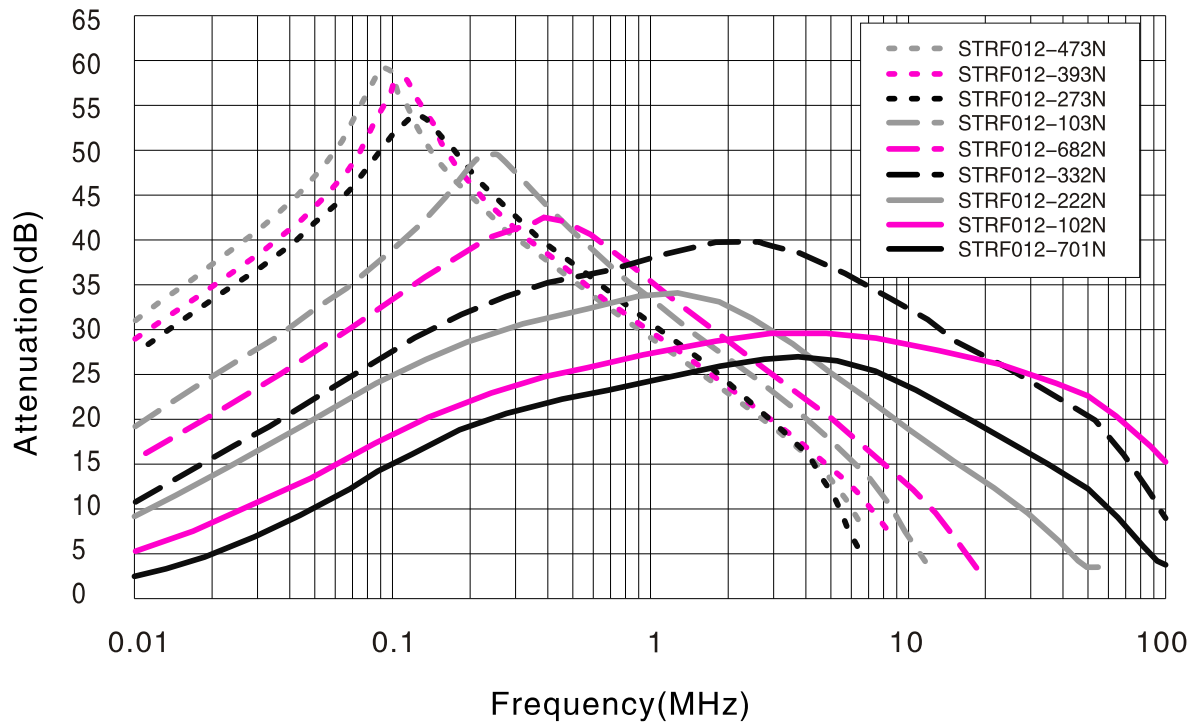
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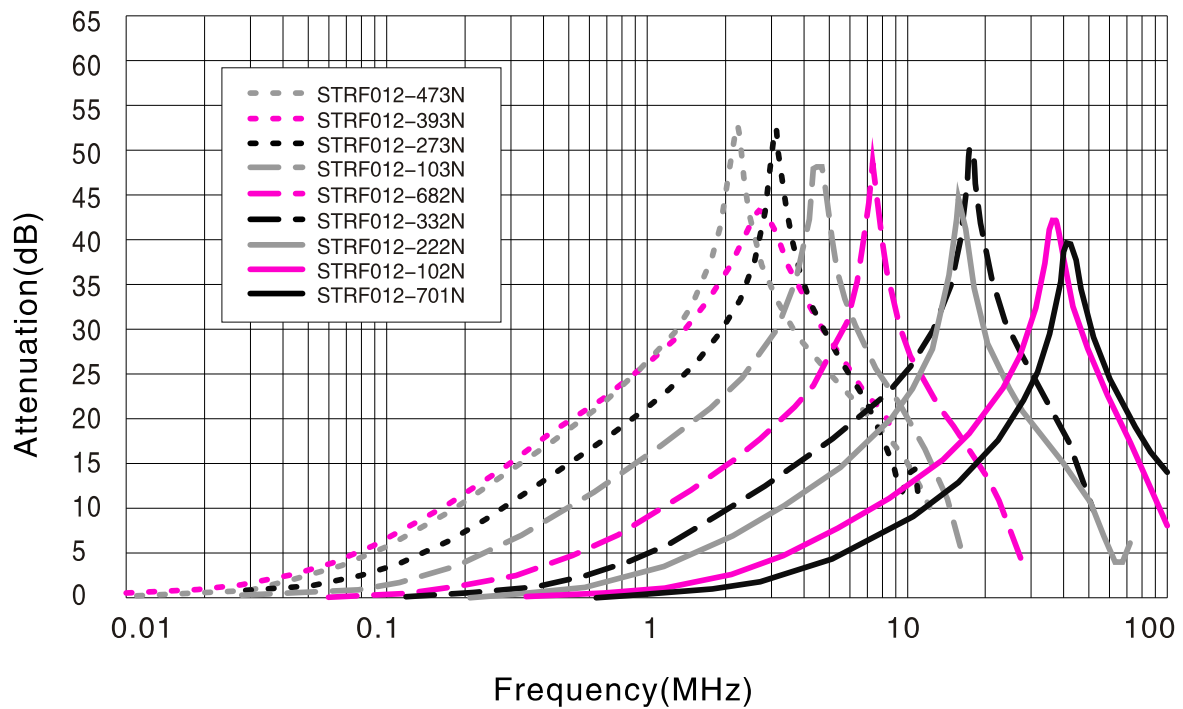
#### NOTES:

Temperature Rise .....40°C typical at IDC  
 Operating Temperature .....-40°C to +125°C(Including self temperature rise)  
 Storage Temperature .....-40°C to +125°C  
 Soldering .....245°C, 5 seconds max  
 Dielectric Strength .....1000 Vrms between windings

## ATTENUATION COMMON MODE



## ATTENUATION DIFFERENTIAL MODE



# SMT COMMON MODE CHOKES

## STRF04 SERIES

### FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI performance
- Meets UL94V-0 flammability standard

### APPLICATIONS:

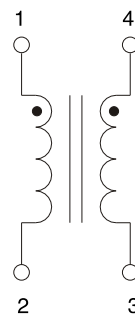
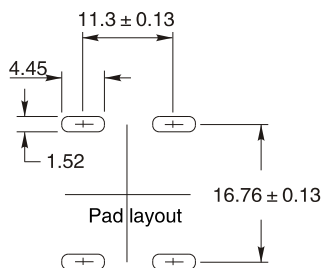
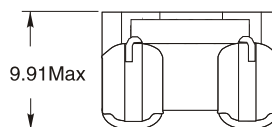
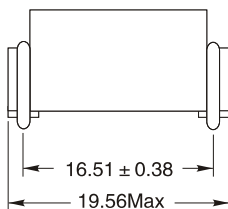
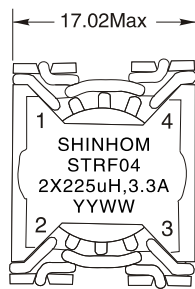
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies



### ELECTRICAL CHARACTERISTICS:

| Part Number | L(0A)<br>(uH) $\pm 35\%$<br>10KHz, 0.1V | IDC<br>(A)Max | DCR<br>(m $\Omega$ )Max | Hi-Pot<br>1mA/2S/60Hz<br>(Vac) |
|-------------|-----------------------------------------|---------------|-------------------------|--------------------------------|
| STRF04-221Y | 225                                     | 3.3           | 60                      | 1000                           |
| STRF04-591Y | 590                                     | 5.6           | 21                      | 1000                           |
| STRF04-771Y | 770                                     | 4.7           | 40                      | 1000                           |
| STRF04-132Y | 1320                                    | 3.3           | 60                      | 1000                           |
| STRF04-152Y | 1470                                    | 2.8           | 80                      | 1000                           |

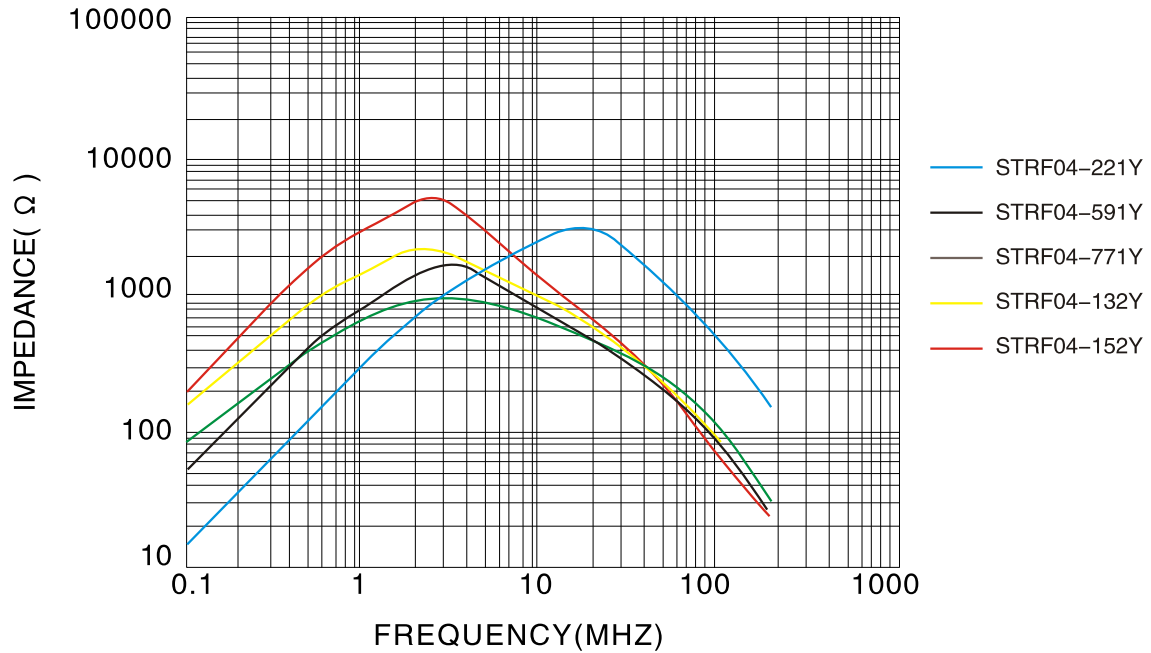
### PHYSICAL CHARACTERISTICS & WINDING



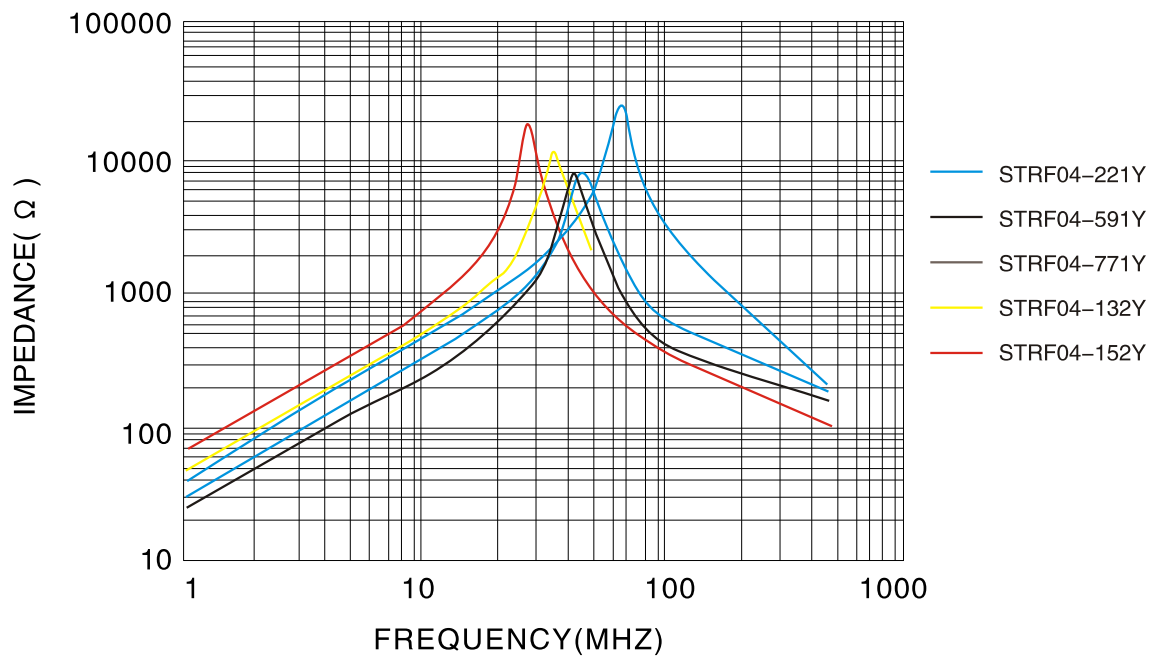
### NOTES:

Temperature Rise .....40°C typical at IDC  
 Operating Temperature .....-40°C to +125°C(Including self temperature rise)  
 Storage Temperature .....-40°C to +125°C  
 Soldering .....245°C, 5 seconds max  
 Dielectric Strength .....1000 Vrms between windings

## IMPEDANCE COMMON MODE



## IMPEDANCE DIFFERENTIAL MODE



# SMT COMMON MODE CHOKES

## STRF06 SERIES

### FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI prformance
- Meets UL94V-0 flammability standard

### APPLICATIONS:

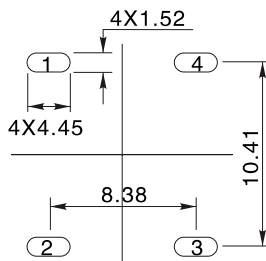
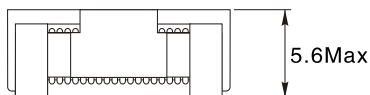
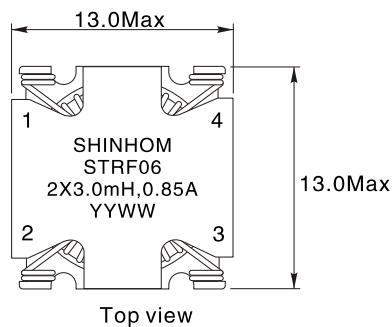
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies



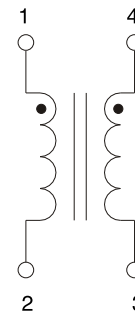
### ELECTRICAL CHARACTERISTICS:

| Part Number | L(0A)<br>(uH) $\pm 35\%$<br>100KHz,0.1V | IDC<br>(A)Max | DCR<br>(m $\Omega$ )Max | Hi-Pot<br>1mA/2S/60Hz<br>(Vac) |
|-------------|-----------------------------------------|---------------|-------------------------|--------------------------------|
| STRF06-881Y | 880                                     | 1.63          | 110                     | 1000                           |
| STRF06-112Y | 1170                                    | 1.22          | 200                     | 1000                           |
| STRF06-302Y | 3000                                    | 0.85          | 280                     | 1000                           |
| STRF06-392Y | 3900                                    | 0.85          | 350                     | 1000                           |
| STRF06-682Y | 6800                                    | 0.30          | 700                     | 1000                           |

### PHYSICAL CHARACTERISTICS & WINDING



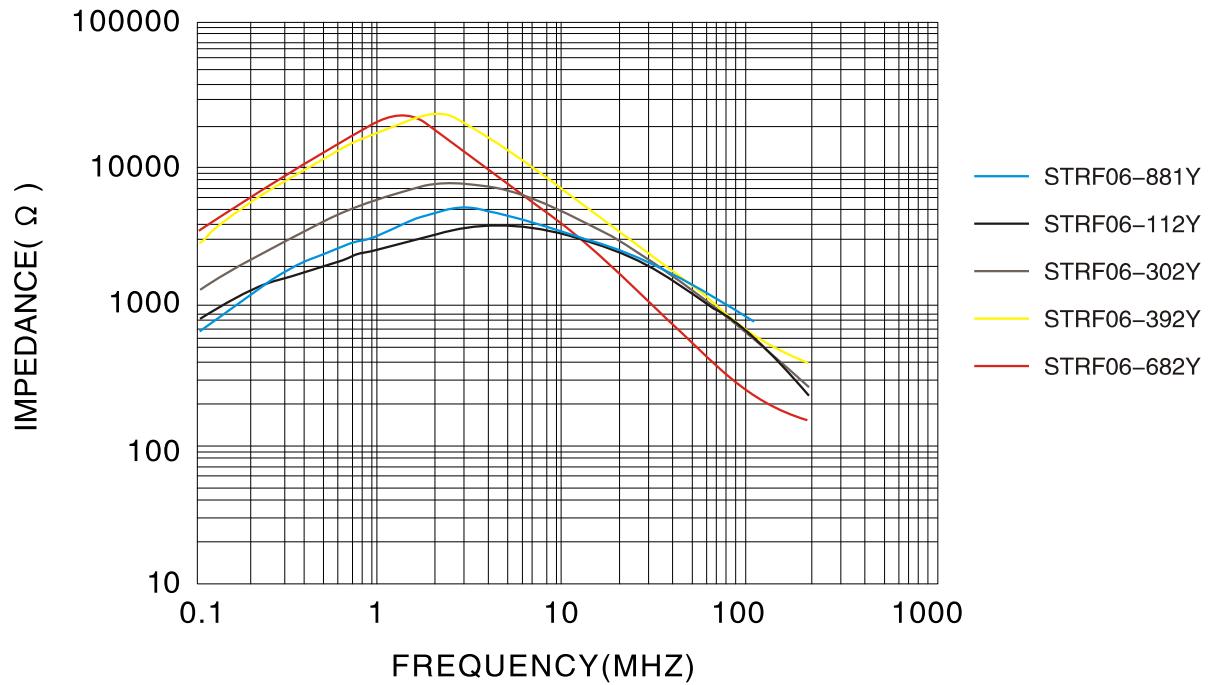
Pad layout



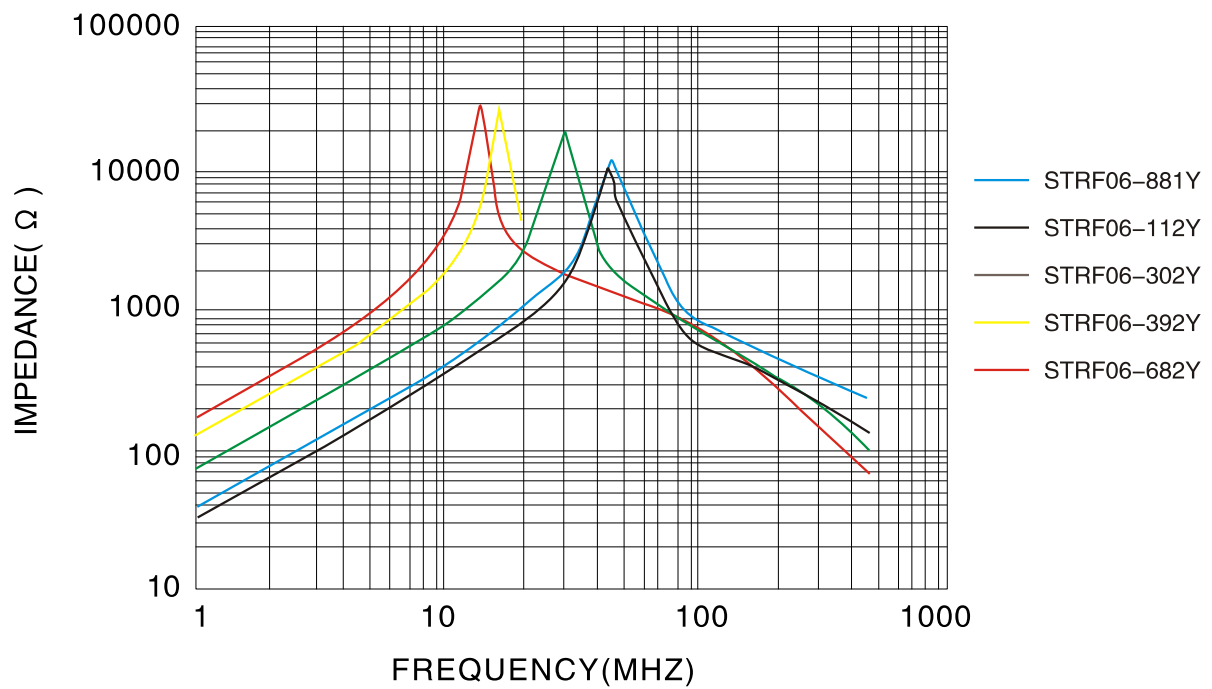
### NOTES:

Temperature Rise .....40°C typical at IDC  
 Operating Temperature .....-40°C to +125°C(Including self temperature rise)  
 Storage Temperature .....-40°C to +125°C  
 Soldering .....245°C, 5 seconds max  
 Dielectric Strength .....1000 Vrms between windings

## IMPEDANCE COMMON MODE



## IMPEDANCE DIFFERENTIAL MODE





# COMMON MODE CHOKE

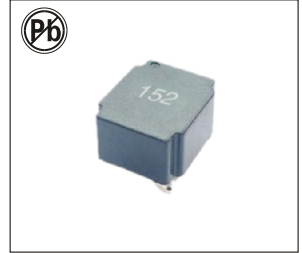
## STRF07 SERIEIS

### FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI prformance
- Meets UL94V-0 flammability standard

### APPLICATIONS:

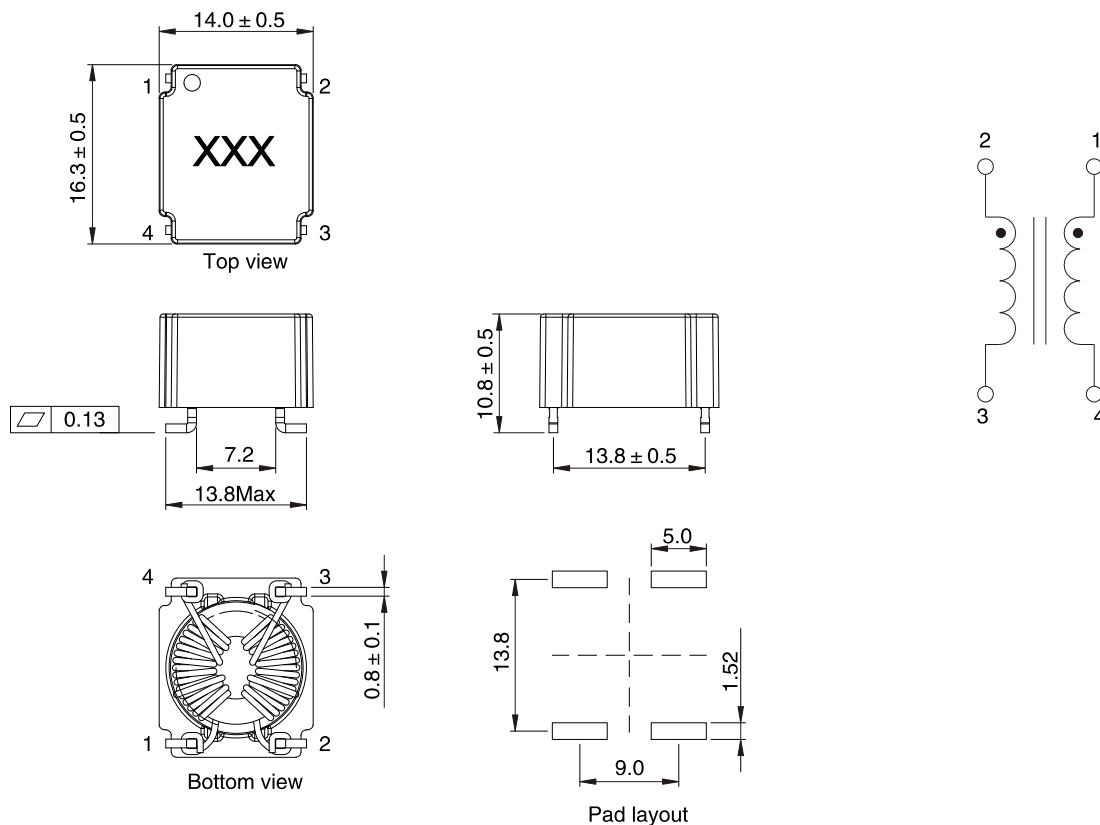
- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies



### ELECTRICAL CHARACTERISTICS:

| Part Number | L(0A)<br>(mH) Min<br>10KHz,0.1V | DCR<br>(mΩ)Max | IDC<br>(A)Max | Hi-Pot<br>(Vdc)<br>50Hz,1mA,1S |
|-------------|---------------------------------|----------------|---------------|--------------------------------|
| STRF07-651Y | 0.65                            | 20             | 3             | 1000                           |
| STRF07-801Y | 0.8                             | 33             | 2.4           | 1000                           |
| STRF07-152Y | 1.5                             | 70             | 1.6           | 1000                           |
| STRF07-602Y | 6.0                             | 200            | 0.9           | 1000                           |
| STRF07-103Y | 10.0                            | 500            | 0.5           | 1000                           |

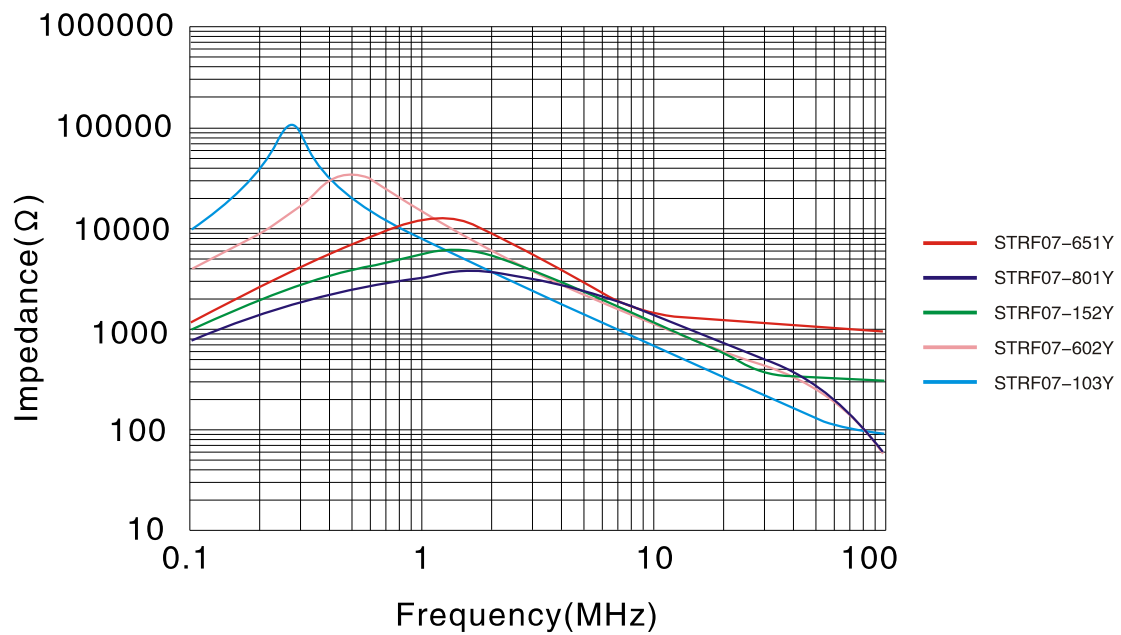
### PHYSICAL CHARACTERISTICS



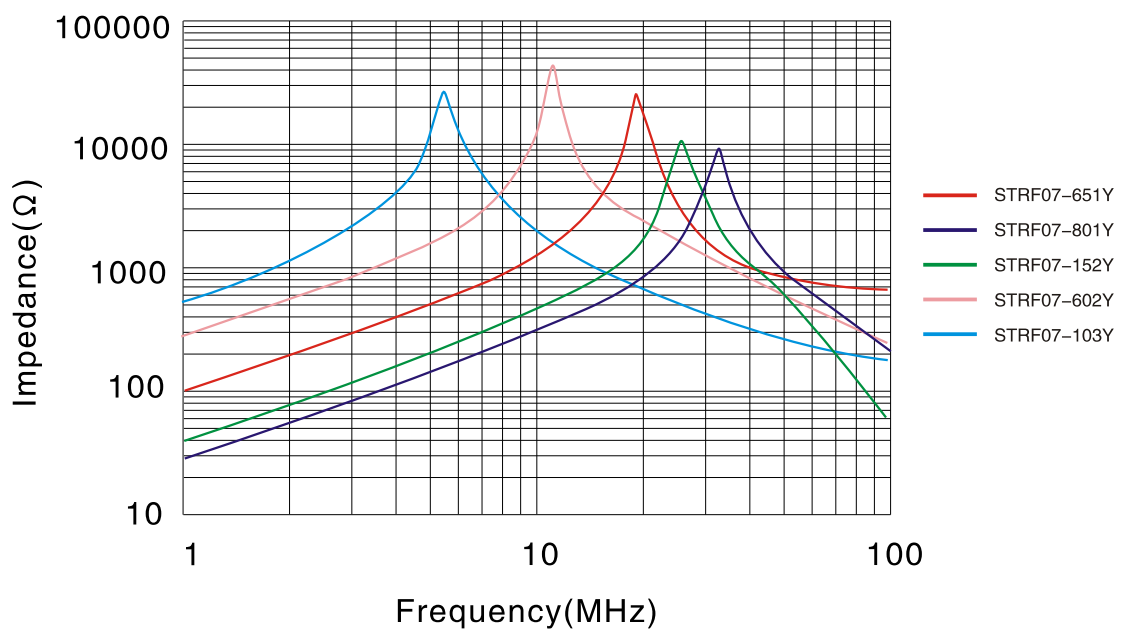
#### NOTES:

Temperature Rise .....40°C typical at IDC  
 Operating Temperature .....-40°C to +125°C(Including self temperature rise)  
 Storage Temperature .....-40°C to +125°C  
 Soldering .....245°C, 5 seconds max  
 Dielectric Strength .....1000 Vrms between windings

## IMPEDANCE COMMON MODE



## IMPEDANCE DIFFERENTIAL MODE



# SMT COMMON MODE CHOKES

## STRF16 SERIES

### FEATURES:

- Common mode chokes for AC power lines
- High impedance to minimize common mode noise
- Excellent EMI prformance
- Meets UL94V-0 flammability standard

### APPLICATIONS:

- EMI filters
- DC-DC brick power supplies
- Discrete output supplies
- Discrete and point-of-use power supplies

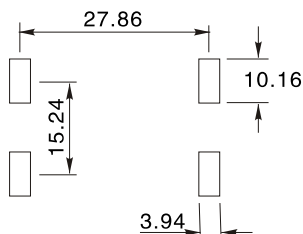
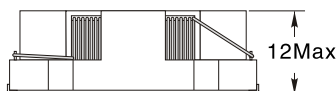
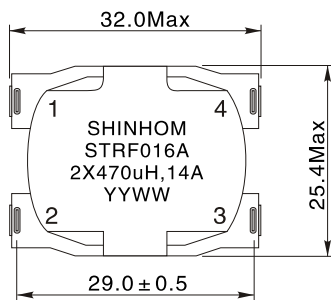


### ELECTRICAL CHARACTERISTICS:

| Part Number   | L(0A)<br>(uH) ± 35%<br>100KHz,0.1V | IDC<br>(A)Max | DCR<br>(mΩ)Max | Hi-Pot<br>1mA/2S/60Hz<br>(Vac) |
|---------------|------------------------------------|---------------|----------------|--------------------------------|
| STRF016□-131Y | 135                                | 26            | 3.5            | 1000                           |
| STRF016□-221Y | 225                                | 20            | 6.0            | 1000                           |
| STRF016□-471Y | 470                                | 14            | 8.0            | 1000                           |
| STRF016□-631Y | 630                                | 11.6          | 10             | 1000                           |
| STRF016□-821Y | 820                                | 7.0           | 15             | 1000                           |

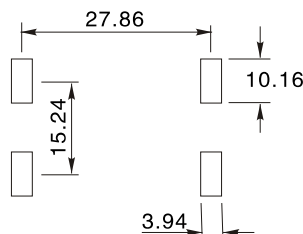
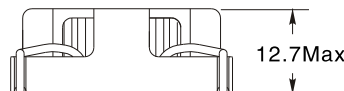
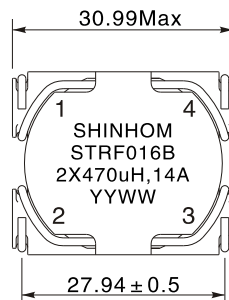
### PHYSICAL CHARACTERISTICS & WINDING

STRF016A

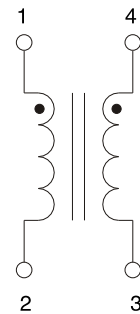


Suggested pad layout

STRF016B



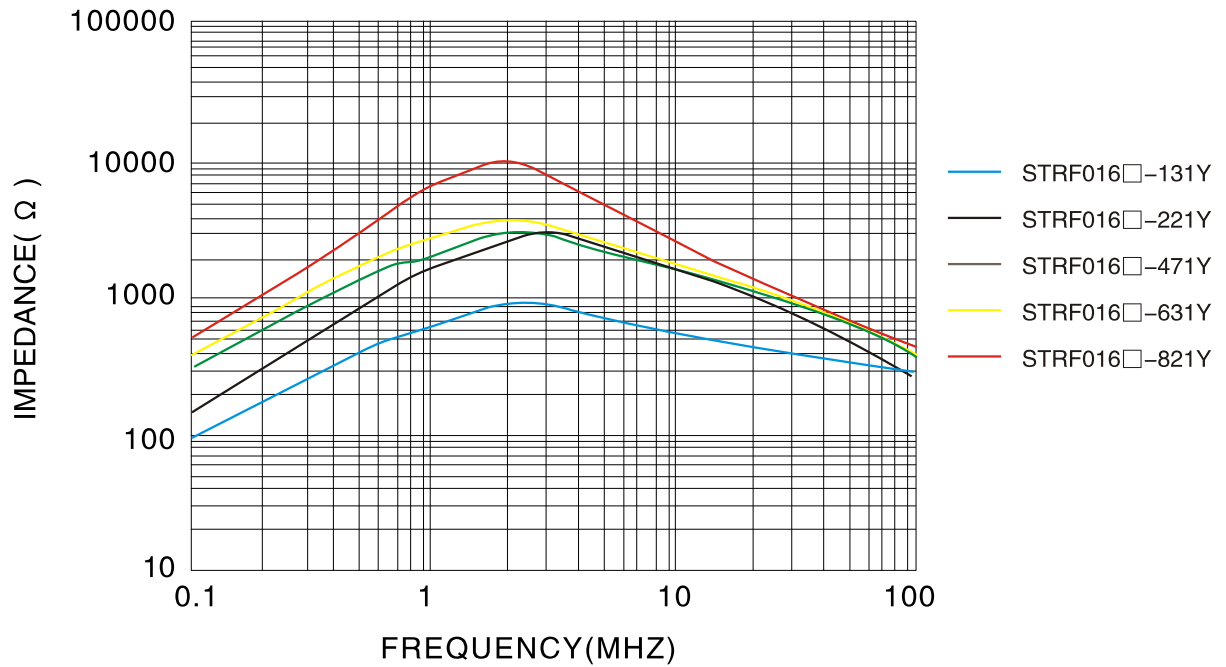
Suggested pad layout



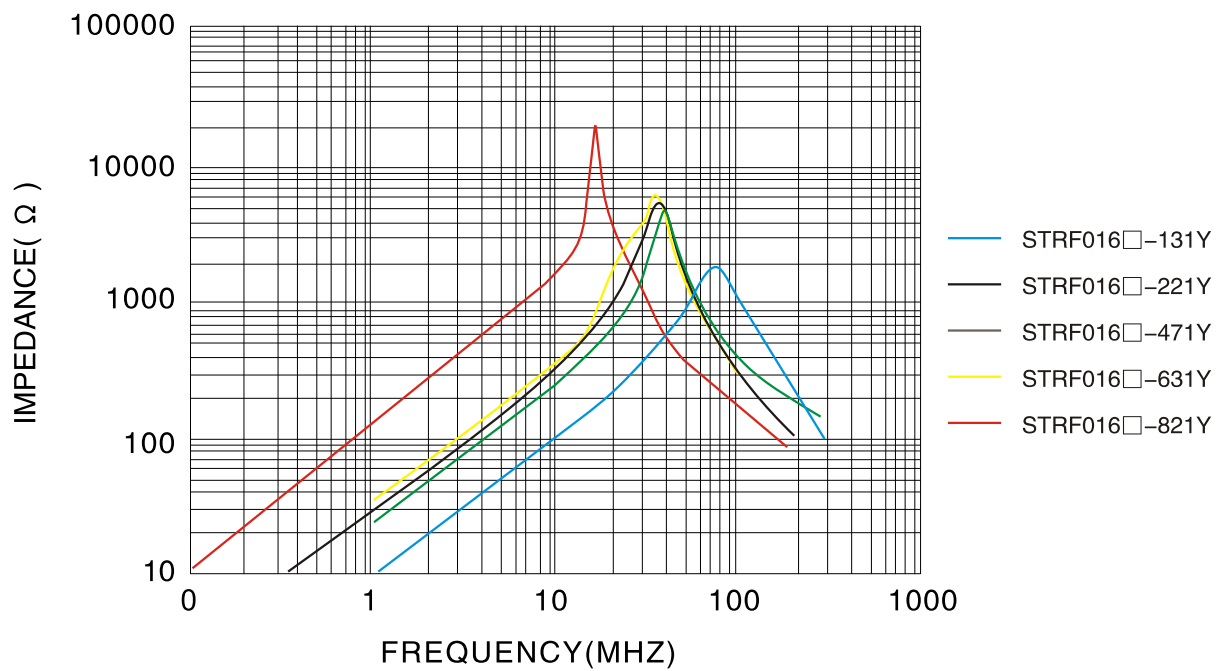
### NOTES:

Temperature Rise .....40°C typical at IDC  
 Operating Temperature .....-40°C to +125°C(Including self temperature rise)  
 Storage Temperature .....-40°C to +125°C  
 Soldering .....245°C, 5 seconds max  
 Dielectric Strength .....1000 Vrms between windings

## IMPEDANCE COMMON MODE



## IMPEDANCE DIFFERENTIAL MODE



# WIRE-WOUND SMT POWER COMMON-MODE CHOKES

## STRF2210 SERIES

### FEATURES:

- Small size with high current
- Stable performance under load bias and high reliability
- High suppression of asymmetric interferences at both low and high frequency
- SMT Type with less height

### APPLICATIONS:

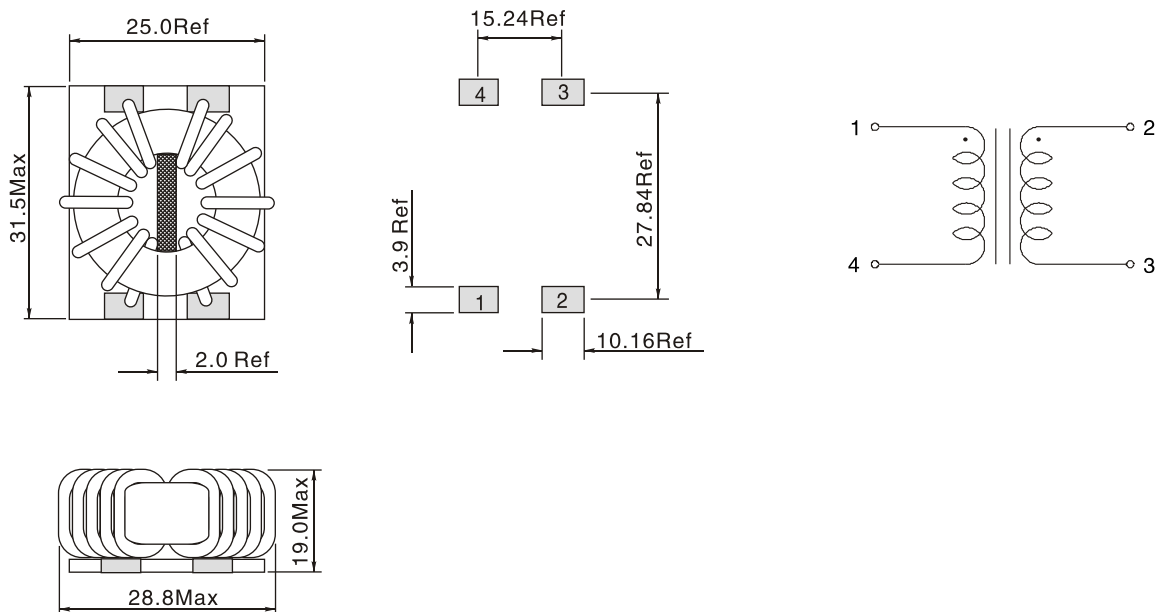
- Interferences suppression of common mode noise
- Power line filter
- Switch-mode power supplies



### ELECTRICAL CHARACTERISTICS:

| Part Number   | Inductance (uH)<br>+35%/-40% | Turns ratio<br>20KHz,1V<br>N1:N2 | DCR (mΩ)<br>Max | Rated Current (A)<br>Max | Hi-Pot<br>60Hz,10mA,2S<br>(V) |
|---------------|------------------------------|----------------------------------|-----------------|--------------------------|-------------------------------|
| STRF2210-680Y | 68                           | 1:1                              | 0.56            | 50                       | 1500                          |
| STRF2210-181Y | 180                          | 1:1                              | 1.35            | 32                       | 1500                          |
| STRF2210-321Y | 320                          | 1:1                              | 2.5             | 28                       | 1500                          |
| STRF2210-621Y | 620                          | 1:1                              | 3.5             | 20                       | 1500                          |
| STRF2210-801Y | 800                          | 1:1                              | 5.3             | 16                       | 1500                          |
| STRF2210-132Y | 1300                         | 1:1                              | 10              | 11                       | 1500                          |
| STRF2210-182Y | 1800                         | 1:1                              | 14              | 9                        | 1500                          |

### TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:



- Inductance Testing: 100KHz,0.1V
- Operating temperature: -40℃ to +125℃(Including self temperature rise)
- Storage Temperature: -40℃ to +125℃
- Resistance to soldering heat: 260℃ for 10 seconds

Note:All specifications subject to change without notice.

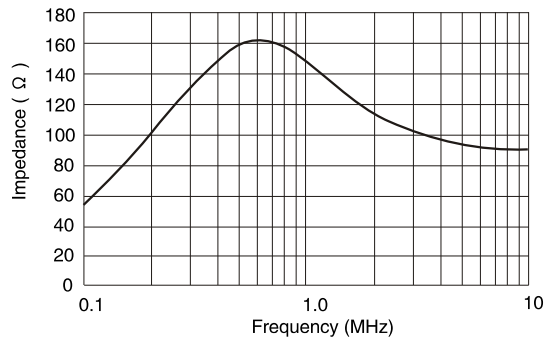
# WIRE-WOUND SMT POWER COMMON-MODE CHOKES

## STRF2210 SERIES

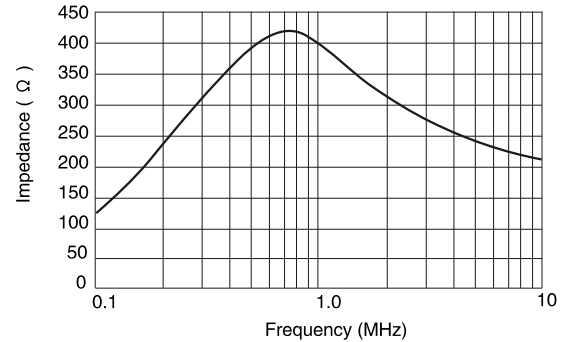


### IMPEDANCE vs FREQUENCY:

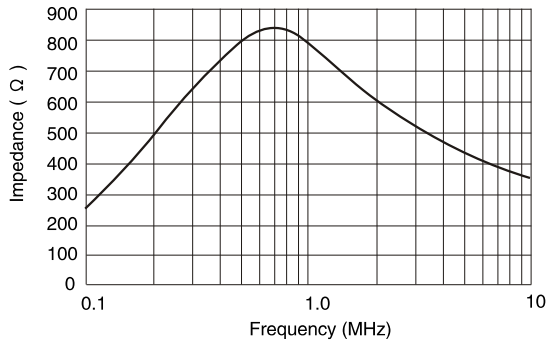
STRF2210-680Y



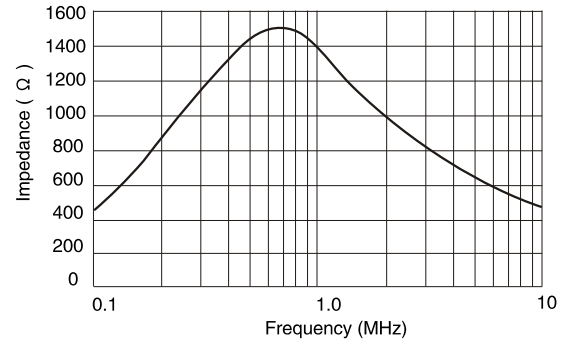
STRF2210-181Y



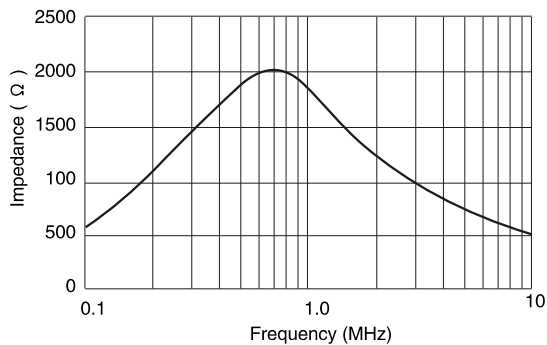
STRF2210-321Y



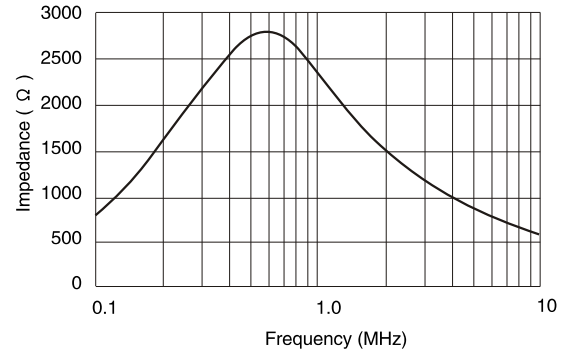
STRF2210-621Y



STRF2210-801Y



STRF2210-132Y



STRF2210-182Y

