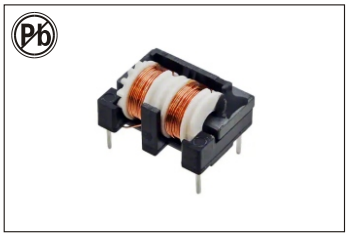
# COMMON MODE CHOKE

# UT1609 SERIES



## FEATURES:

- 17.0X13.0mm Max.(LXW), 9.5mm Max. Height.
- Inductance range: 0.47mH~10mH
- Rated current range: 0.2~1.10A
- Small size and large inductance type.
- Exellent attenuation characteristics in low frequency.
- RoHS Compliance

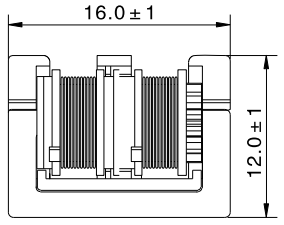
## APPLICATIONS:

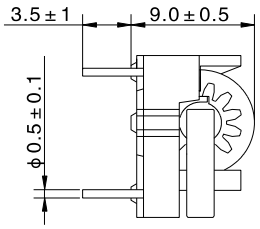
- DC/DC, AC/DC line noise suppression
- Communication System
- Automotive Systems
- LCD/PDP Televisions
- VCR,AV,OA equipment.

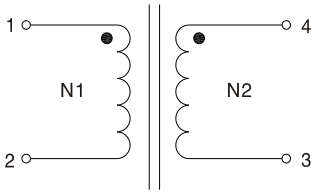
## ELECTRICAL CHARACTERISTICS:

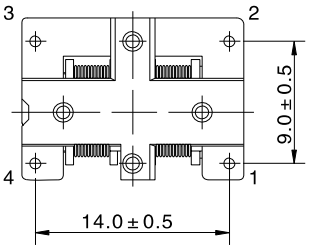
| Part Number | Inductance (mH) Min 1KHz | Leakage Inductance (uH) Max 100KHz | DCR (Ω) Max @20℃ | Rated current (A) 50/60Hz |
|---|---|---|---|---|
| UT1609–471Y–1.1A | 0.47 | 50 | 0.15 | 1.1 |
| UT1609–681Y–0.85A | 0.68 | 50 | 0.25 | 0.85 |
| UT1609–102Y–0.65A | 1.0 | 150 | 0.35 | 0.65 |
| UT1609–222Y–0.45A | 2.2 | 150 | 0.7 | 0.45 |
| UT1609–392Y–0.36A | 3.9 | 200 | 1.2 | 0.36 |
| UT1609–472Y–0.34A | 4.7 | 300 | 1.6 | 0.34 |
| UT1609–682Y–0.25A | 6.8 | 400 | 2.5 | 0.25 |
| UT1609–103Y–0.2A | 10.0 | 550 | 4.0 | 0.2 |

## PHYSICAL CHARACTERISTICS:

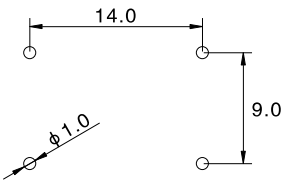



Bottom view



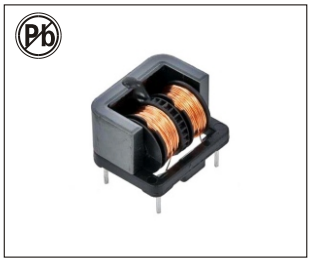

Recommended land pattern

## TECHNICAL INFORMATION:

1. Rated current: The AC current at which the temperature rise is △T=45℃(Ta=20℃)
2. Please give sufficient consideration to the thick wire used when producing the P.C.B.(mounting holes ϕ1.0mm)
3. Storage temperature range: –40℃ ~ +125℃.
4. Operating temperature range: –40℃ ~ +125℃ (Including coil's self temperature rise)
5. Max operating voltage:250V
6. Marking: Part number and date code
7. Resistance to soldering heat 260 ℃ for 10 seconds
8. All specifications subject to change without notice.

# AC LINE FILTERS,COMMON MODE COILS

# UT1711 SERIES



## FEATURES:

- Ferrite material
- High permeability
- High impedance in wide frequency range due to divided bobbin
- Small gear common mode choke for low current applications
- 11mm height low profile
- Operating temperature range from –25℃ to +120℃
- UL 94V–0 flame retardant rated base and bobbin

## APPLICATIONS:

- Audio–visual equipment
- Office automation equipment
- Digital appliances
- Compact power supplies

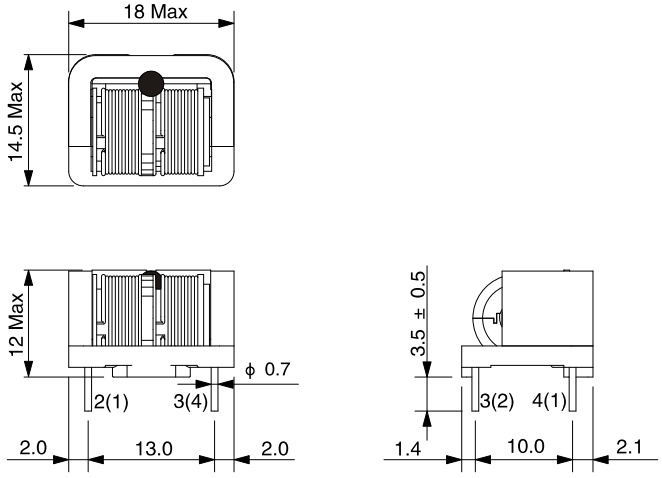
## ELECTRICAL CHARACTERISTICS:

| Part Number | Inductance (mH)Min | Rated current (A) | DCR Max. (Ω). | Temperature rise ( ℃ )Max |
|---|---|---|---|---|
| UT1711–162Y | 1.6 | 2.0 | 0.09 | 55 |
| UT1711–292Y | 2.9 | 1.7 | 0.12 | 55 |
| UT1711–432Y | 4.3 | 1.5 | 0.14 | 55 |
| UT1711–642Y | 6.4 | 1.3 | 0.21 | 55 |
| UT1711–812Y | 8.1 | 1.1 | 0.27 | 55 |
| UT1711–103Y | 10.8 | 1.0 | 0.36 | 55 |
| UT1711–163Y | 16.9 | 0.8 | 0.56 | 55 |
| UT1711–193Y | 19.6 | 0.7 | 0.71 | 55 |
| UT1711–233Y | 23.7 | 0.6 | 0.78 | 55 |
| UT1711–403Y | 40.8 | 0.5 | 1.36 | 55 |
| UT1711–593Y | 59.6 | 0.4 | 2.02 | 55 |
| UT1711–114Y | 115.7 | 0.3 | 3.57 | 55 |

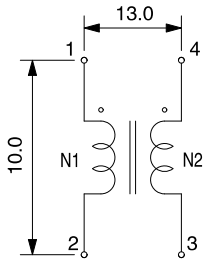
- Rated Voltage: 250 VAC
- Withstanding Voltage: 2400 VAC (2 seconds, between lines)
- Insulation Resistance: > 100 MΩ at 500 VDC (between lines)
- Inductance Measurement Condition: 10 kHz
- Thermal Class: E (120℃)
- Operating Temperature Range: –25℃ to +120℃ (include self temperature rise)

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

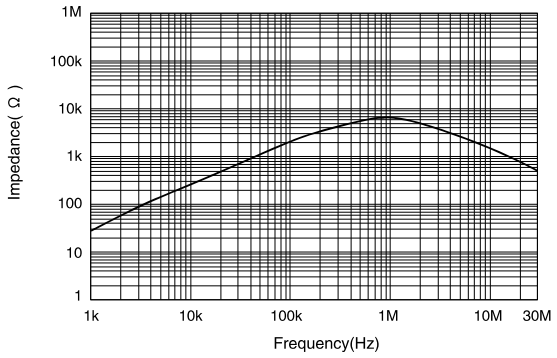
**Dimensions(mm)**



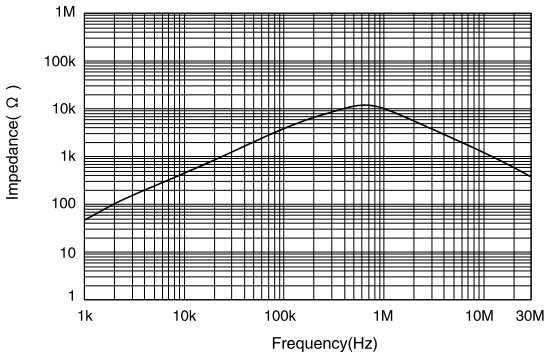

**Winding**



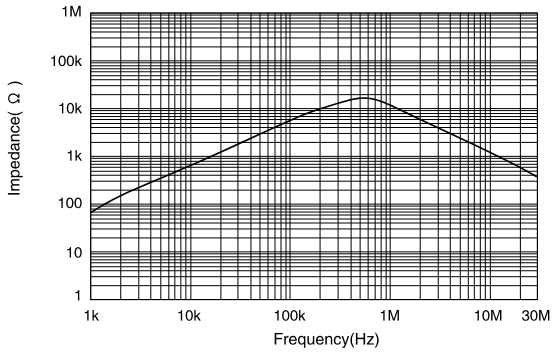
UT1711–162Y



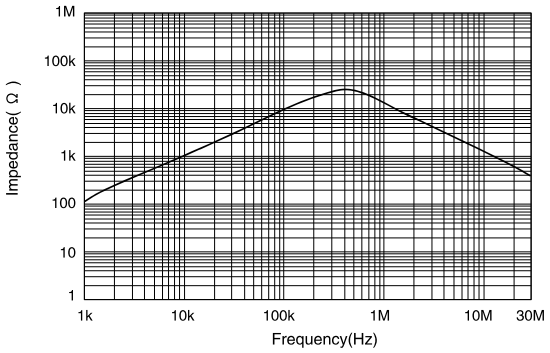

UT1711–292Y



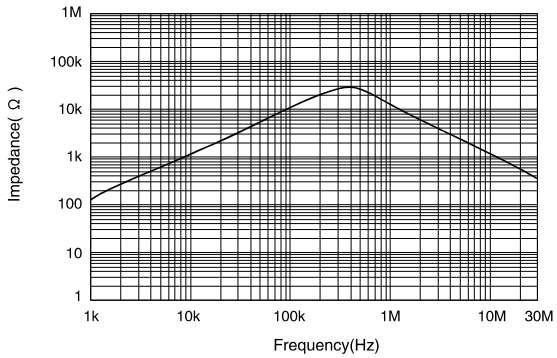

UT1711–432Y



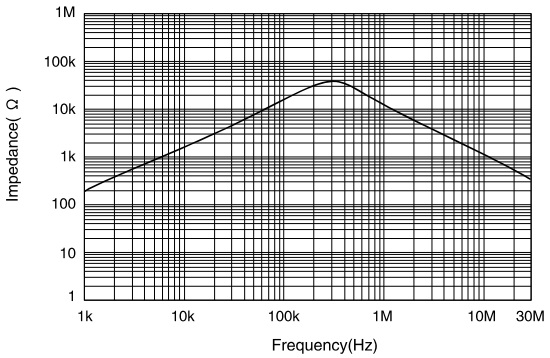

UT1711–642Y



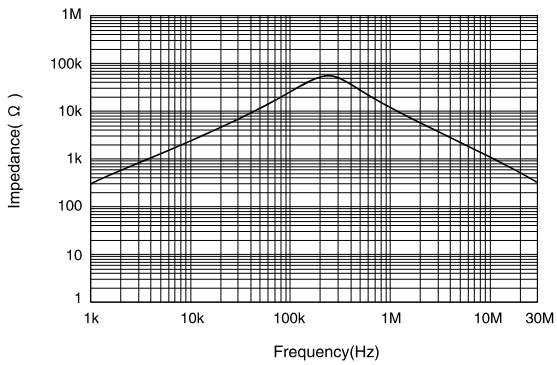

UT1711–812Y



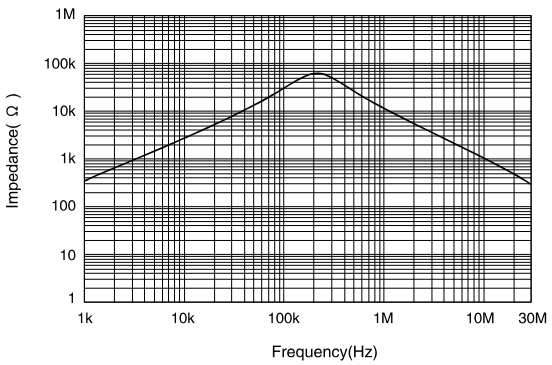

UT1711–103Y



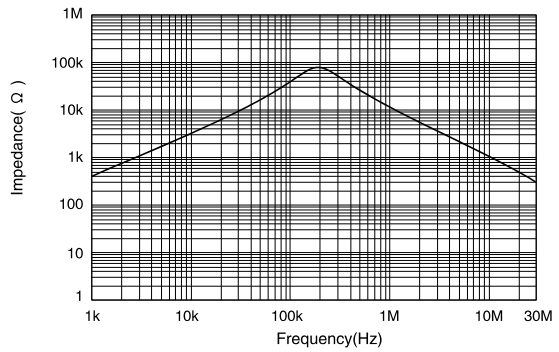

UT1711–163Y



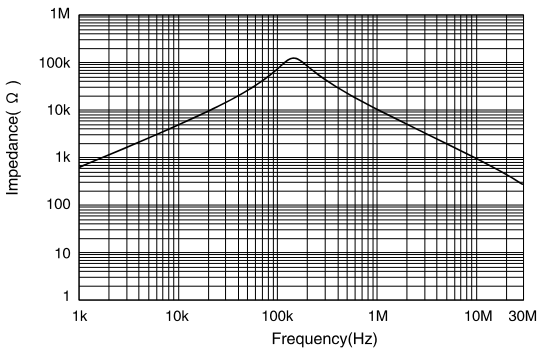

UT1711–193Y



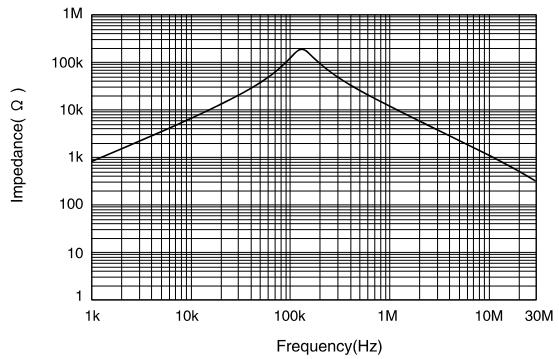
UT1711–233Y



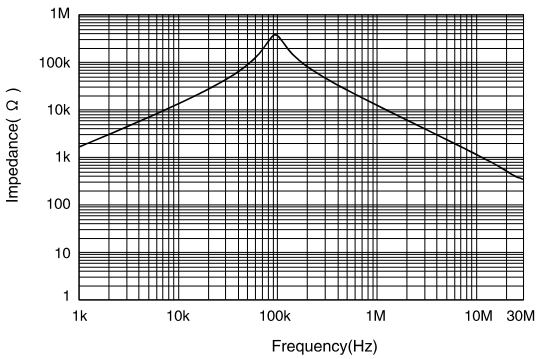

UT1711–403Y




UT1711–593Y

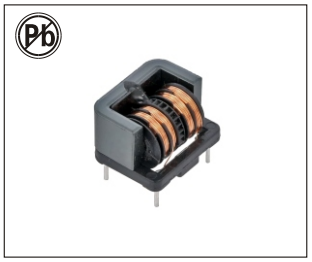



UT1711–114Y



# AC LINE FILTERS,COMMON MODE COILS

# UT1711A SERIES



## FEATURES:

- Ferrite material
- High permeability
- High impedance in wide frequency range due to divided bobbin
- Small gear common mode choke for low current applications
- 11mm height low profile
- Operating temperature range from –25℃ to +120℃
- UL 94V–0 flame retardant rated base and bobbin

## APPLICATIONS:

- Audio–visual equipment
- Office automation equipment
- Digital appliances
- Compact power supplies

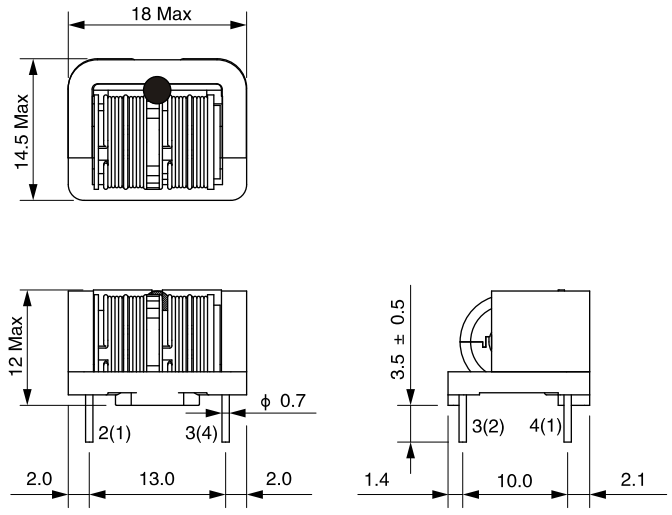
## ELECTRICAL CHARACTERISTICS:

| Part Number | Inductance (mH)Min | Rated current (A) | DCR Max. (Ω). | Temperature rise ( ℃ )Max |
|---|---|---|---|---|
| UT1711A–132Y | 1.3 | 2.0 | 0.08 | 50 |
| UT1711A–232Y | 2.3 | 1.7 | 0.1 | 50 |
| UT1711A–362Y | 3.6 | 1.5 | 0.13 | 50 |
| UT1711A–462Y | 4.6 | 1.3 | 0.18 | 50 |
| UT1711A–642Y | 6.4 | 1.1 | 0.24 | 50 |
| UT1711A–842Y | 8.4 | 1.0 | 0.32 | 50 |
| UT1711A–133Y | 13.4 | 0.8 | 0.5 | 50 |
| UT1711A–153Y | 15.4 | 0.7 | 0.63 | 50 |
| UT1711A–183Y | 18.5 | 0.6 | 0.69 | 50 |
| UT1711A–323Y | 32.4 | 0.5 | 1.21 | 50 |
| UT1711A–463Y | 46.7 | 0.4 | 1.79 | 50 |
| UT1711A–923Y | 92.5 | 0.3 | 3.18 | 50 |

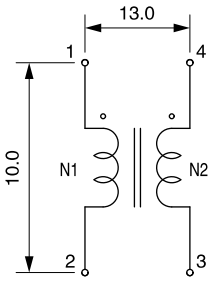
- Rated Voltage: 250 VAC
- Withstanding Voltage: 2400 VAC (2 seconds, between lines)
- Insulation Resistance: > 100 MΩ at 500 VDC (between lines)
- Inductance Measurement Condition: 10 kHz
- Thermal Class: E (120℃)
- Operating Temperature Range: –25℃ to +120℃ (include self temperature rise)

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

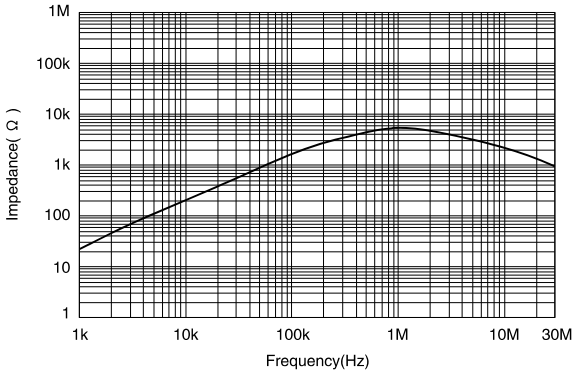
**Dimensions(mm)**



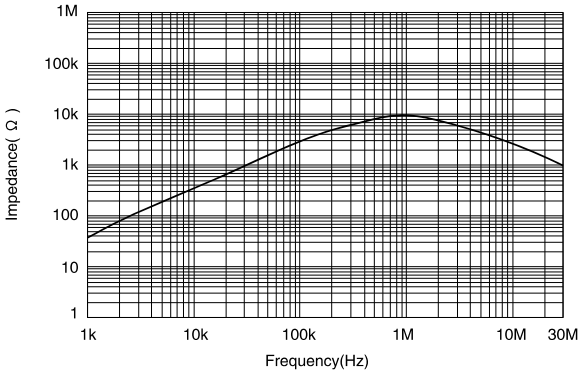

**Winding**



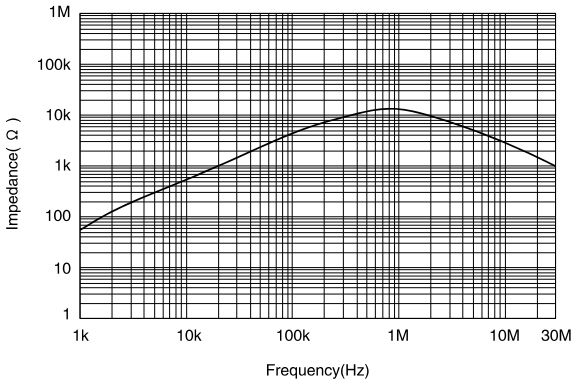
UT1711A–132Y



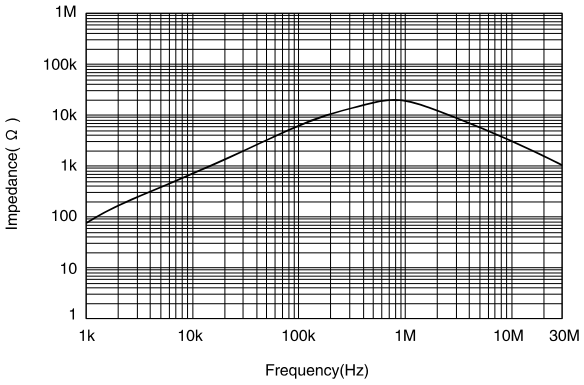

UT1711A–232Y



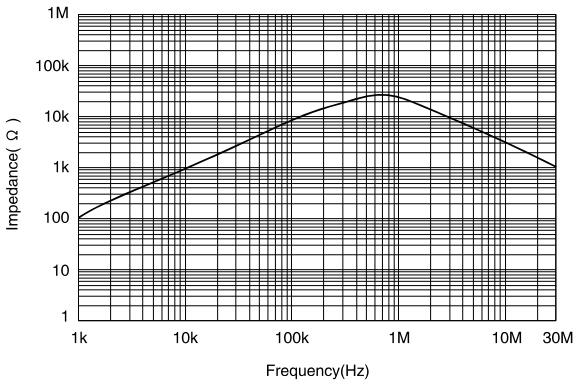

UT1711A–362Y



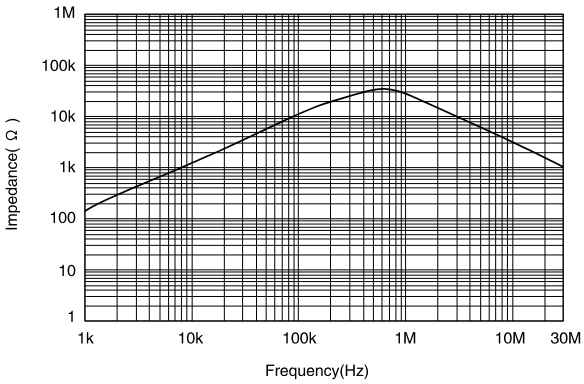

UT1711A–462Y



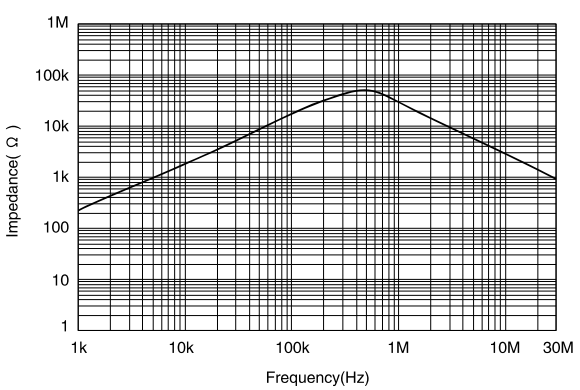

UT1711A–642Y



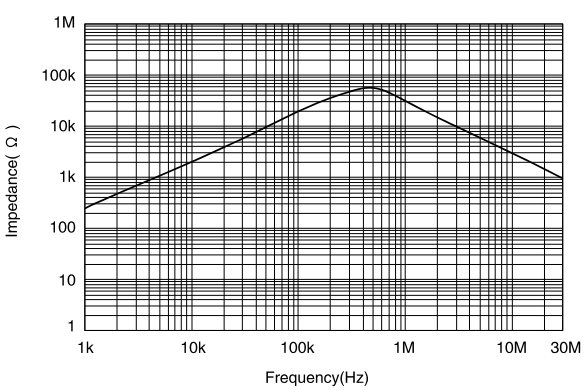

UT1711A–842Y



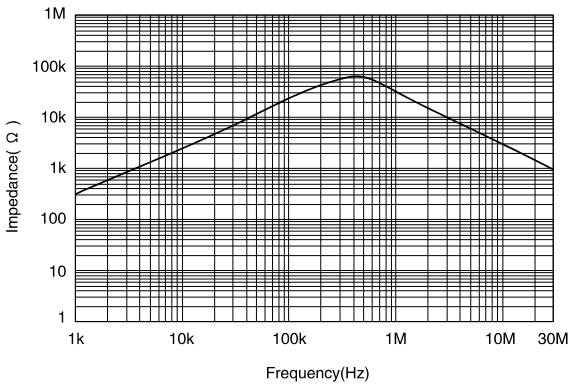

UT1711A–133Y



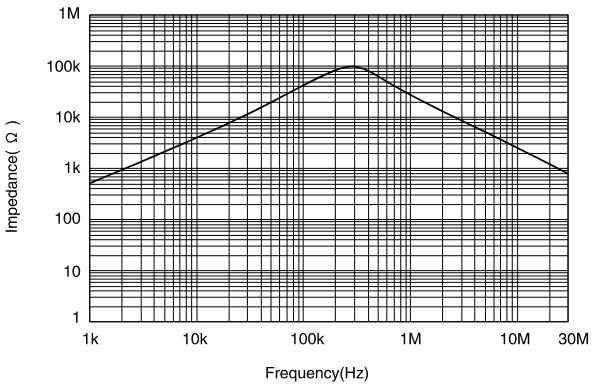

UT1711A–153Y



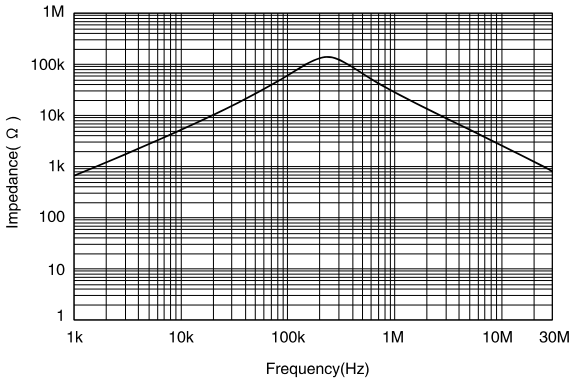
UT1711A–183Y



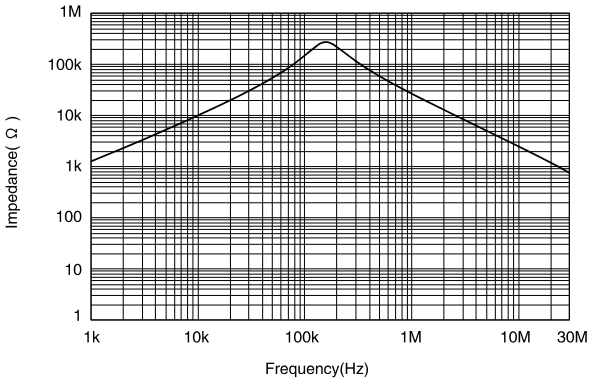

UT1711A–323Y




UT1711A–463Y

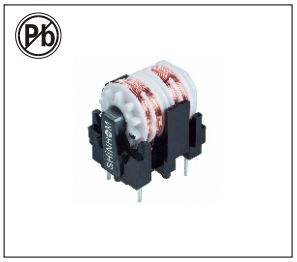



UT1711A–923Y



# COMMON MODE POWER LINE CHOKE

# UT2024 SERIES



## FEATURES:

- Closed rectanqular ferrite core
- 2 section winding for excellent high frequency performance
- 1% stray inductance for symmetrical interference suppression

## APPLICATIONS:

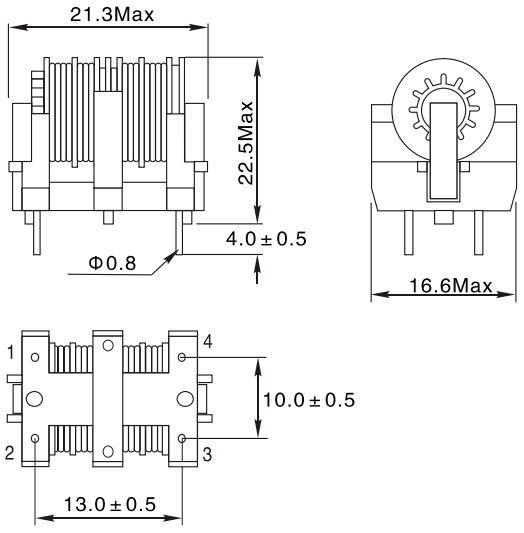
- Switch mode power supplies
- Suppression of common mode noise
- Compact switch mode power supplies
- Electronic ballast applications(LED bulb)
- Lighting

## ELECTRICAL CHARACTERISTICS:

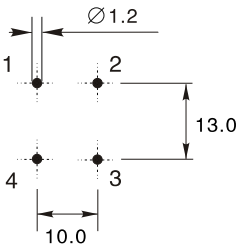
| Part Number | L (mH)Min | Rated Current (A) | RDC max. (Ω) |
|---|---|---|---|
| UT2024–821Y | 0.82 | 2.0 | 0.065 |
| UT2024–122Y | 1.2 | 1.6 | 0.095 |
| UT2024–182Y | 1.8 | 1.5 | 0.12 |
| UT2024–222Y | 2.2 | 1.3 | 0.165 |
| UT2024–272Y | 2.7 | 1.2 | 0.19 |
| UT2024–332Y | 3.3 | 1.2 | 0.21 |
| UT2024–392Y | 3.9 | 1.0 | 0.28 |
| UT2024–562Y | 5.6 | 0.8 | 0.415 |
| UT2024–682Y | 6.8 | 0.7 | 0.47 |
| UT2024–103Y | 10 | 0.6 | 0.71 |
| UT2024–183Y | 18 | 0.5 | 1.2 |
| UT2024–223Y | 22 | 0.4 | 1.64 |
| UT2024–333Y | 33 | 0.3 | 2.5 |

## PHYSICAL CHARACTERISTICS:

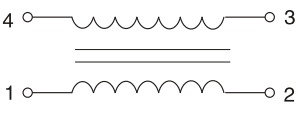
**Dimensions 1**




**Hole pattern(in mm)**




**Winding**




Notes:

Rated voltage.....250Vac

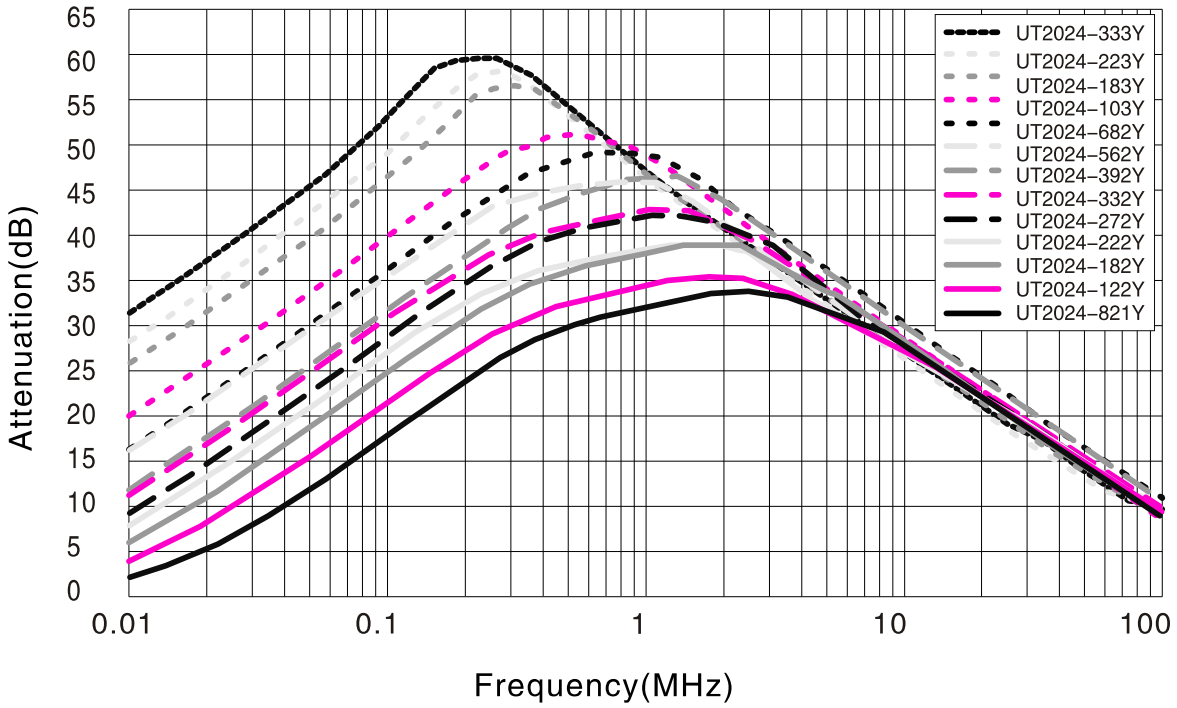
Frequency.....50/60Hz

Insulation test voltage..... 2000V

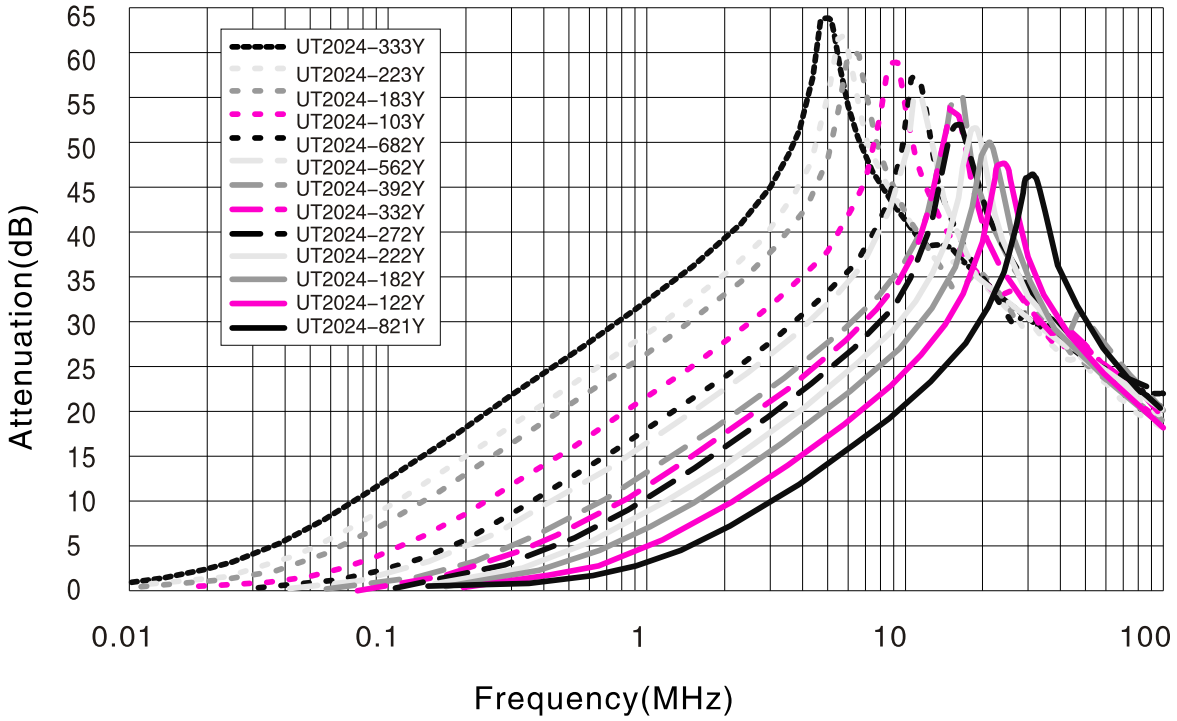
Operating temperature.....–25 ℃ to +125 ℃

Housing..... UL94 V–0

## ATTENUATION COMMON MODE

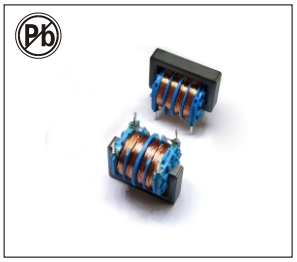



## ATTENUATION DIFFERENTIAL MODE



# COMMON MODE POWER LINE CHOKE

# UT2323 SERIES



## FEATURES:

- High resonance frequency due to 2–section winding
- Approx. 1% stray inductance for symmetrical interference suppression
- Low leakage due to closed core shape
- High pulse strength
- Low whirring noise
- Suitable for wave soldering
- RoHS–compatible

## APPLICATIONS:

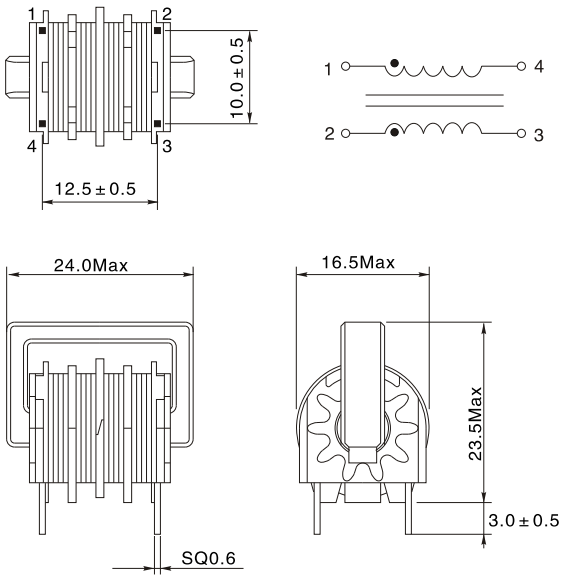
- Suppression of common–mode interferences
- Switch–mode power applications
- Electronic ballasts in lamps

## ELECTRICAL CHARACTERISTICS:

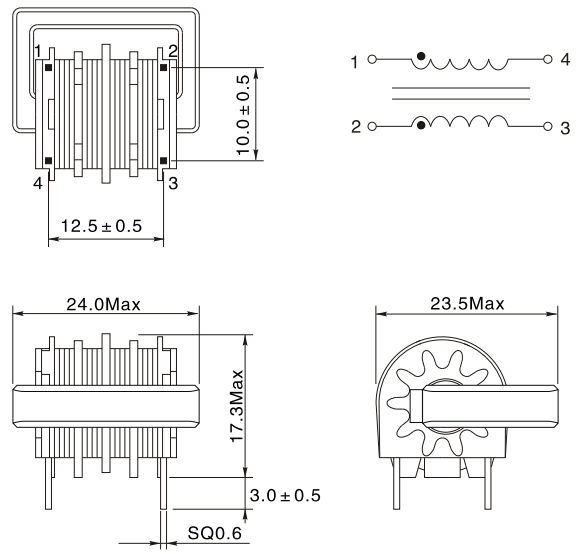
| Part Number | L(mH) +50%/–30% | Lk(uH) Typ | Rated Current (A) | RDC(mΩ) Max |
|---|---|---|---|---|
| UT2323V/H–332Y | 3.3 | 27 | 2.2 | 110 |
| UT2323V/H–682Y | 6.8 | 55 | 1.7 | 190 |
| UT2323V/H–103Y | 10 | 85 | 1.4 | 300 |
| UT2323V/H–153Y | 15 | 125 | 1.1 | 440 |
| UT2323V/H–223Y | 22 | 165 | 1.0 | 580 |
| UT2323V/H–273Y | 27 | 230 | 0.9 | 750 |
| UT2323V/H–393Y | 39 | 330 | 0.7 | 1100 |
| UT2323V/H–473Y | 47 | 400 | 0.6 | 1400 |
| UT2323V/H–104Y | 100 | 850 | 0.4 | 3000 |

## PHYSICAL CHARACTERISTICS:

UT2323V




UT2323H




Notes:

Rated voltage.....250Vac

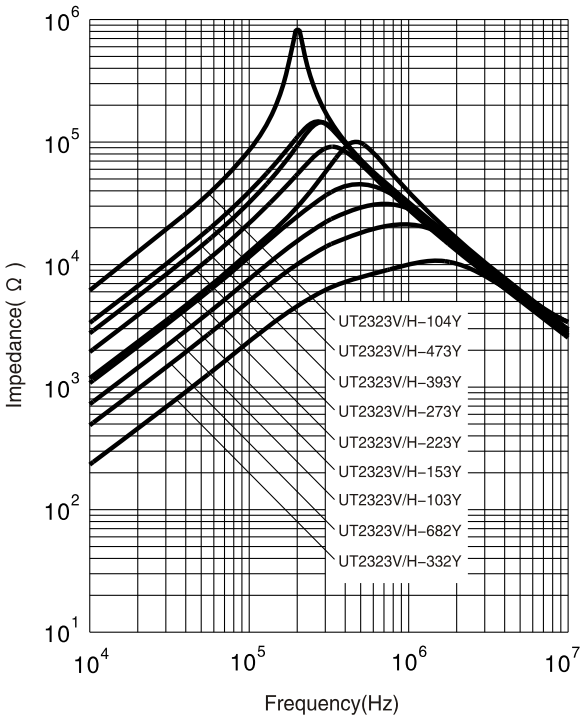
Frequency.....50/60Hz

Insulation test voltage..... 1500V

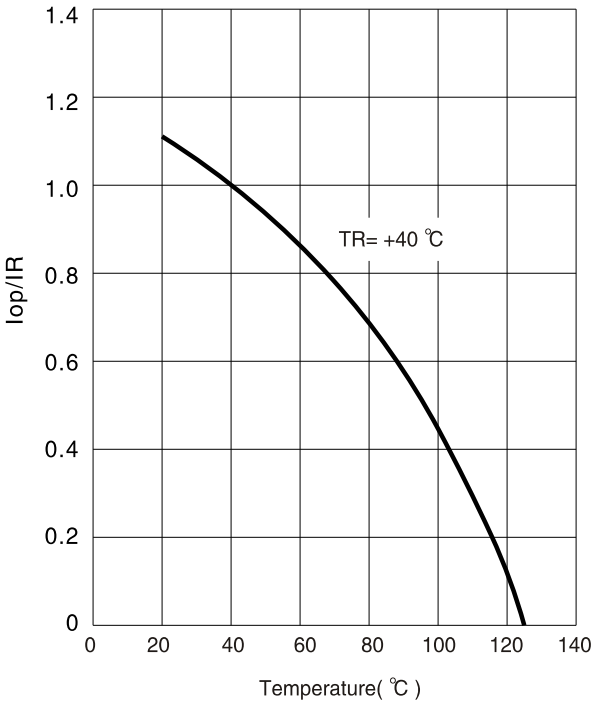
Operating temperature.....–25 ℃ to +125 ℃

Housing..... UL94 V–0

Impedance |Z| versus frequency F
measured with windings in parallel at +20℃
typical values

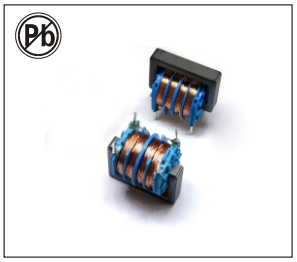



Current derating Iop/IR
versus ambient temperature TA



# COMMON MODE POWER LINE CHOKE

# UT2020 SERIES



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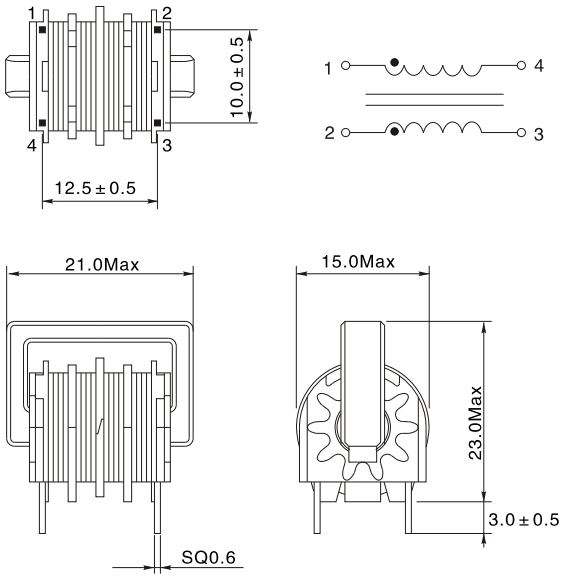
## ELECTRICAL CHARACTERISTICS:

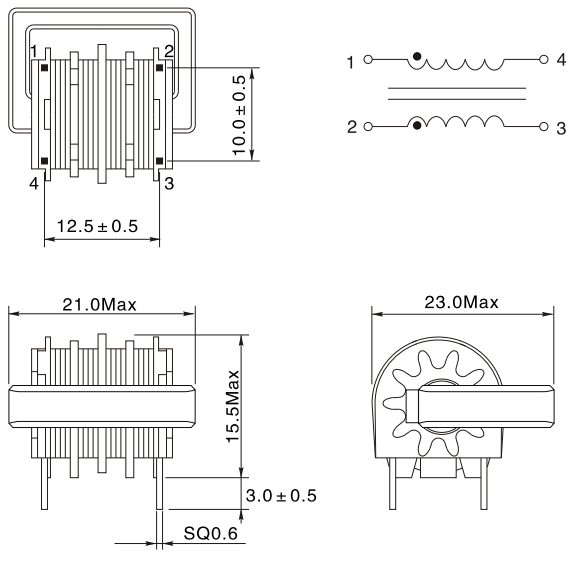
| Part Number | L(mH) +50%/–30% | Lk(uH) Typ | Rated Current (A) | RDC(mΩ) Max |
|---|---|---|---|---|
| UT2020V/H–332Y | 3.3 | 35 | 1.8 | 140 |
| UT2020V/H–682Y | 6.8 | 70 | 1.3 | 280 |
| UT2020V/H–103Y | 10 | 100 | 1.1 | 400 |
| UT2020V/H–153Y | 15 | 150 | 0.9 | 600 |
| UT2020V/H–223Y | 22 | 220 | 0.8 | 800 |
| UT2020V/H–273Y | 27 | 270 | 0.7 | 1000 |
| UT2020V/H–393Y | 39 | 390 | 0.6 | 1500 |
| UT2020V/H–473Y | 47 | 470 | 0.5 | 2000 |
| UT2020V/H–683Y | 68 | 700 | 0.4 | 3000 |
| UT2020V/H–104Y | 100 | 1000 | 0.35 | 4500 |

## PHYSICAL CHARACTERISTICS:

UT2020V




UT2020H

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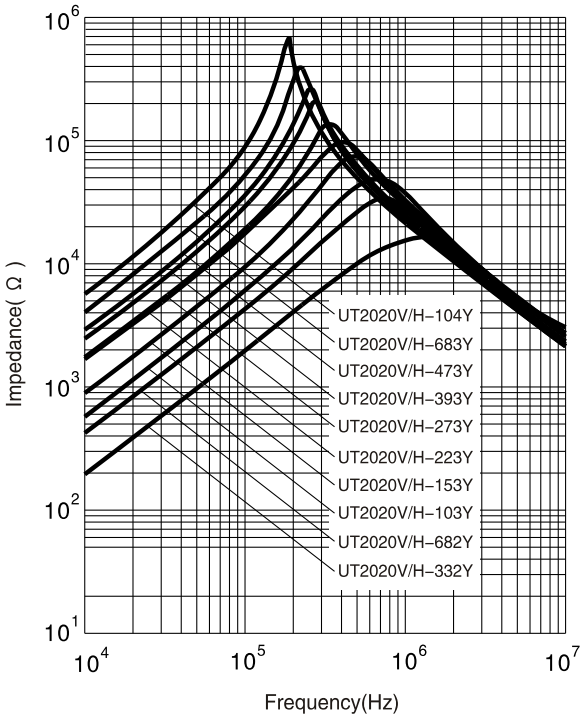


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