



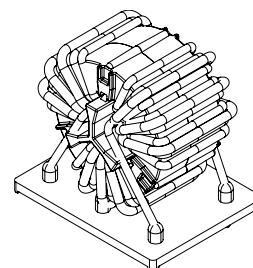
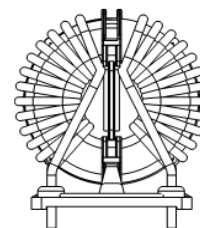
Ferrite Core Common Choke Coil

Features

- 5~90A, Single phase, 3-phase
- Ferrite core
- Used High Permeability
- Realizes effective noise reduction at AM radio band
- Compact dimension
- PCB mounting compatible (Vertical or Horizontal)
- Insulation grade: Class B (130℃)
- Operating temperature range : -40℃~120℃

Typical Application

- Application Fields
 - ・ UPS
 - ・ PV inverter
 - ・ Air conditioner
 - ・ APF/SVG
 - ・ PFC rectifier
 - ・ EV/HEV
 - ・ High power battery charging system



Single/Three phase List (PCB V-Mounting)

No.	P/N	Rated Current	L(mH) Min.	DCR TYP.	Wire Size	Dimension MAX (mm)	Weight TYP.	Page	remarks
		(A)	10KHz	at 25℃ (mΩ)	(mm)	L×W×H	(g)		
1	CMB38V-50210R0	10	5.00	12.0	Φ1.5	52×30×50	105	P01	single phase
2	CMB38V-25215R0	15	2.50	6.0	Φ1.8	52×30×50	115	P02	
3	CMB38V-12220R0	20	1.20	3.5	Φ1.5 2P	52×30×50	115	P03	
4	CMB38V-70130R0	30	0.70	1.7	Φ1.8 2P	52×30×50	115	P04	
5	CMY37V-20210R0	10	2.00	8.5	Φ1.5	59×35×57	110	P05	3-phase
6	CMY37V-16215R0	15	1.60	5.5	Φ1.8	59×35×57	120	P06	
7	CMY37V-70120R0	20	0.70	3.0	Φ1.5 2P	59×35×57	120	P07	
8	CMY37V-40130R0	30	0.40	1.5	Φ1.8 2P	59×35×57	125	P08	

All characteristics specification may be change without noticing. Products will be provided according to customer's Submission of Specification.

All Rights are Reserved by Tamura Corporation of China

Confidential and Proprietary Information of Tamura corporation

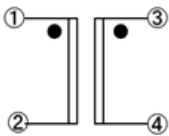
CMB38V-50210R0 5.0mH/10A

CM Series Single Phase Ferrite Core Common Choke Coil

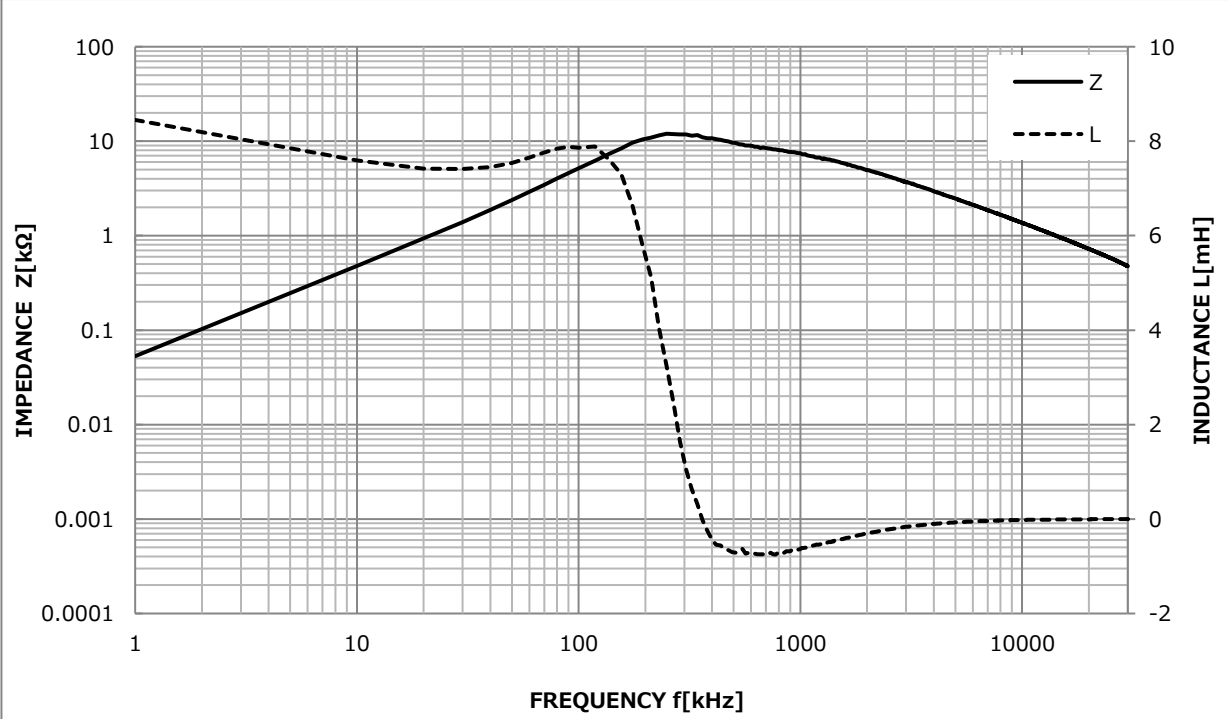
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④]	5.0mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④]	5.00 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④]	12.0 mΩ typ. 15.0 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②:③-④]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②:③-④]	>100MΩ	
Creepage/clearance	-	[①-②:③-④]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	52 x 30 x 50	105 g

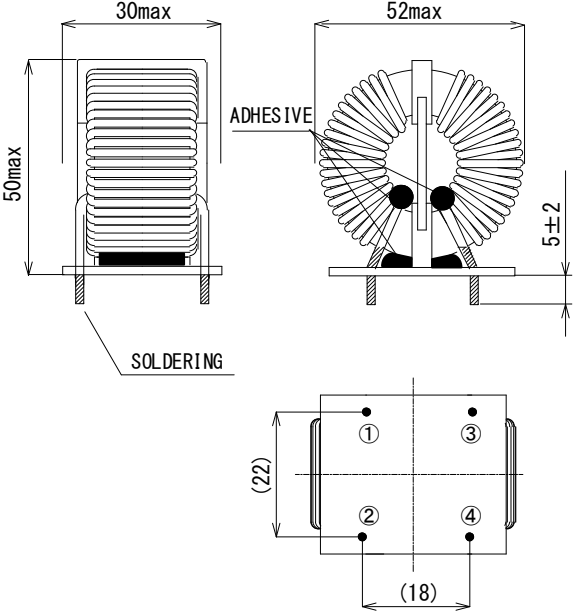
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:
Larger than: $\Phi 1.8$

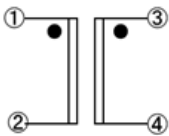
CMB38V-25215R0 2.5mH/15A

CM Series Single Phase Ferrite Core Common Choke Coil

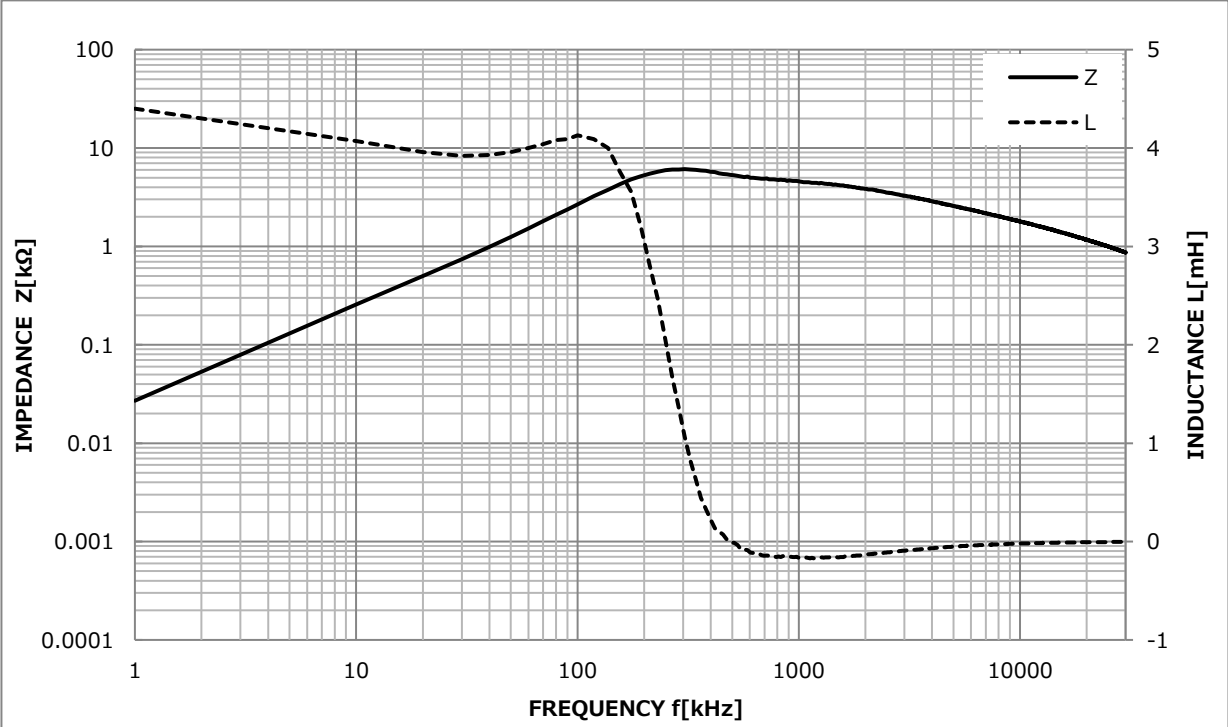
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④]	2.5mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④]	2.60 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④]	6.0 mΩ typ. 7.5 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②:③-④]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②:③-④]	>100MΩ	
Creepage/clearance	-	[①-②:③-④]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	52 x 30 x 50	115 g

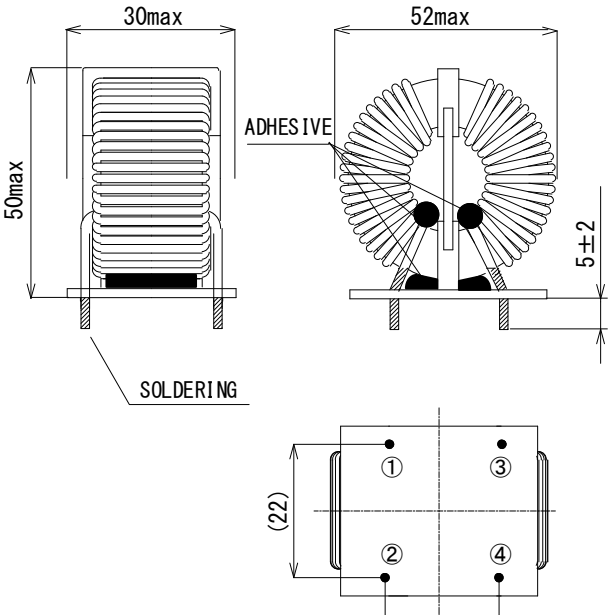
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:
Larger than: $\Phi 2.1$

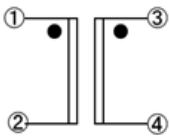
CMB38V-12220R0 1.2mH/20A

CM Series Single Phase Ferrite Core Common Choke Coil

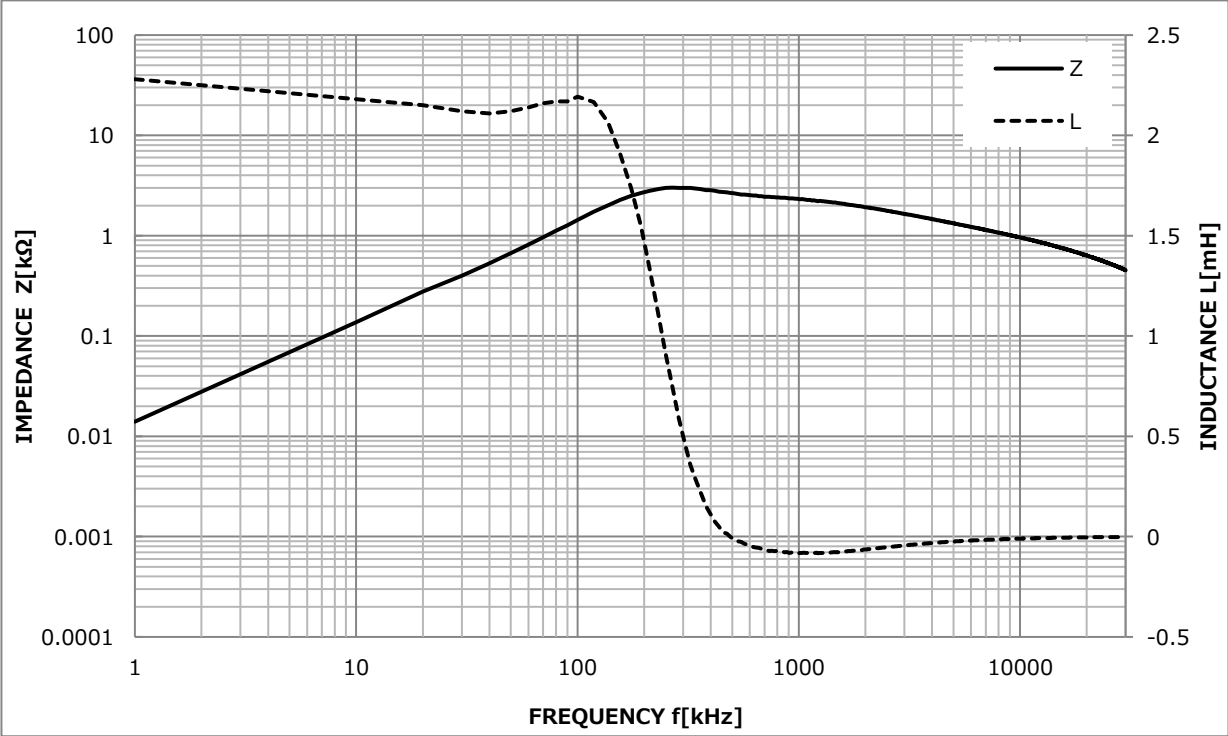
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④]	1.2mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④]	1.45 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④]	3.5 mΩ typ. 4.0 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②:③-④]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②:③-④]	>100MΩ	
Creepage/clearance	-	[①-②:③-④]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	52 x 30 x 50	115 g

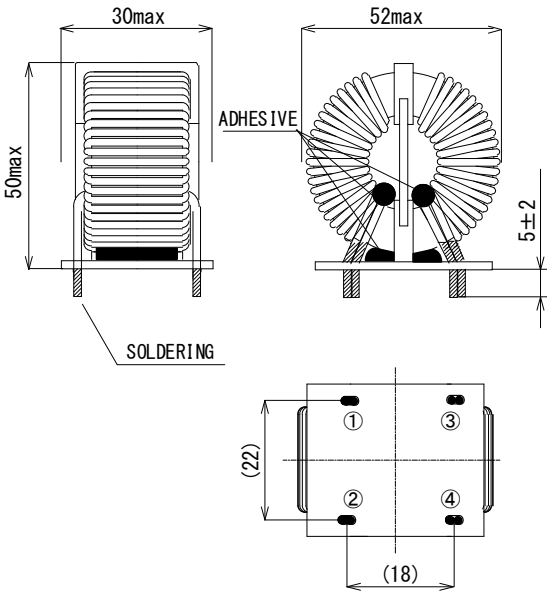
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:

Larger than: 1.8x3.6

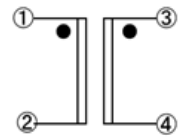
CMB38V-70130R0 0.7mH/30A

CM Series Single Phase Ferrite Core Common Choke Coil

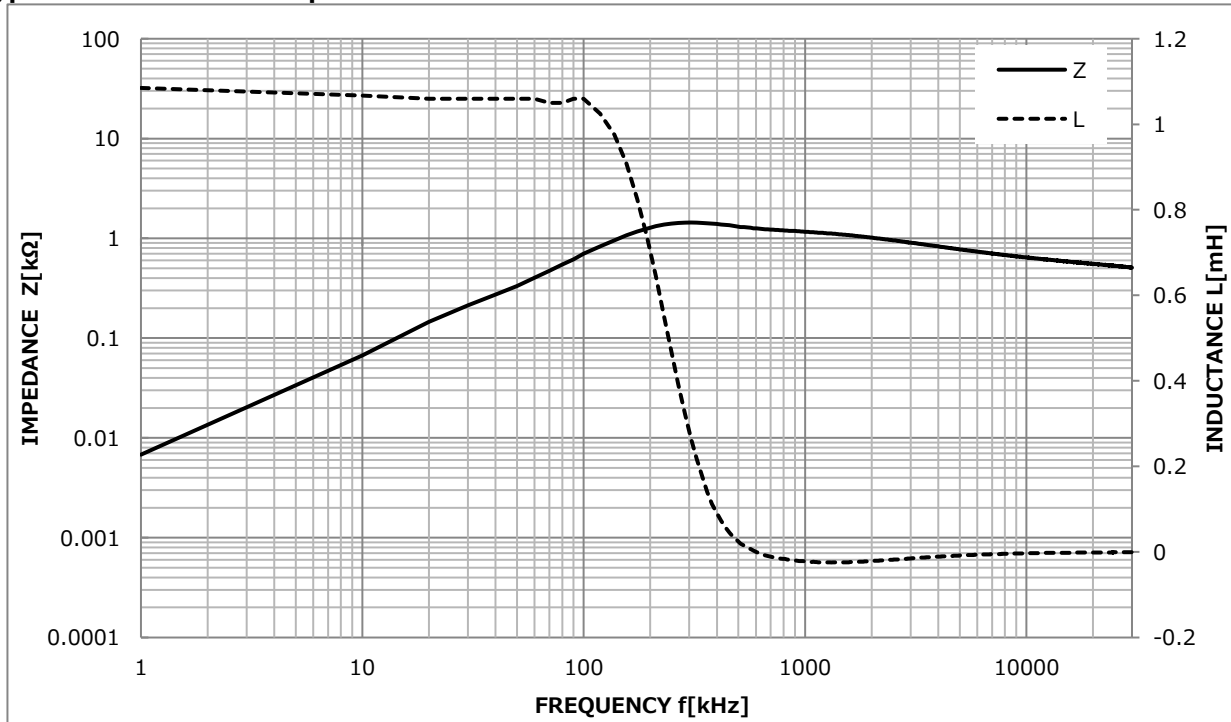
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④]	0.7mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④]	0.70 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④]	1.7 mΩ typ. 2.0 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②:③-④]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②:③-④]	>100MΩ	
Creepage/clearance	-	[①-②:③-④]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	52 x 30 x 50	115 g

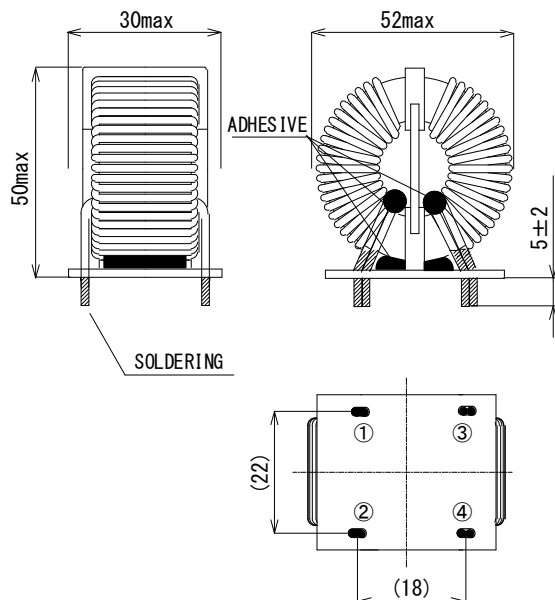
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:

Larger than: 2.1x4.2

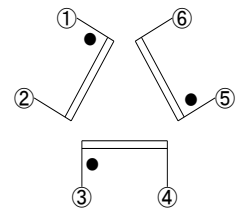
CMY37V-20210R0 2mH/10A

CM Series Three Phase Ferrite Core Common Choke Coil

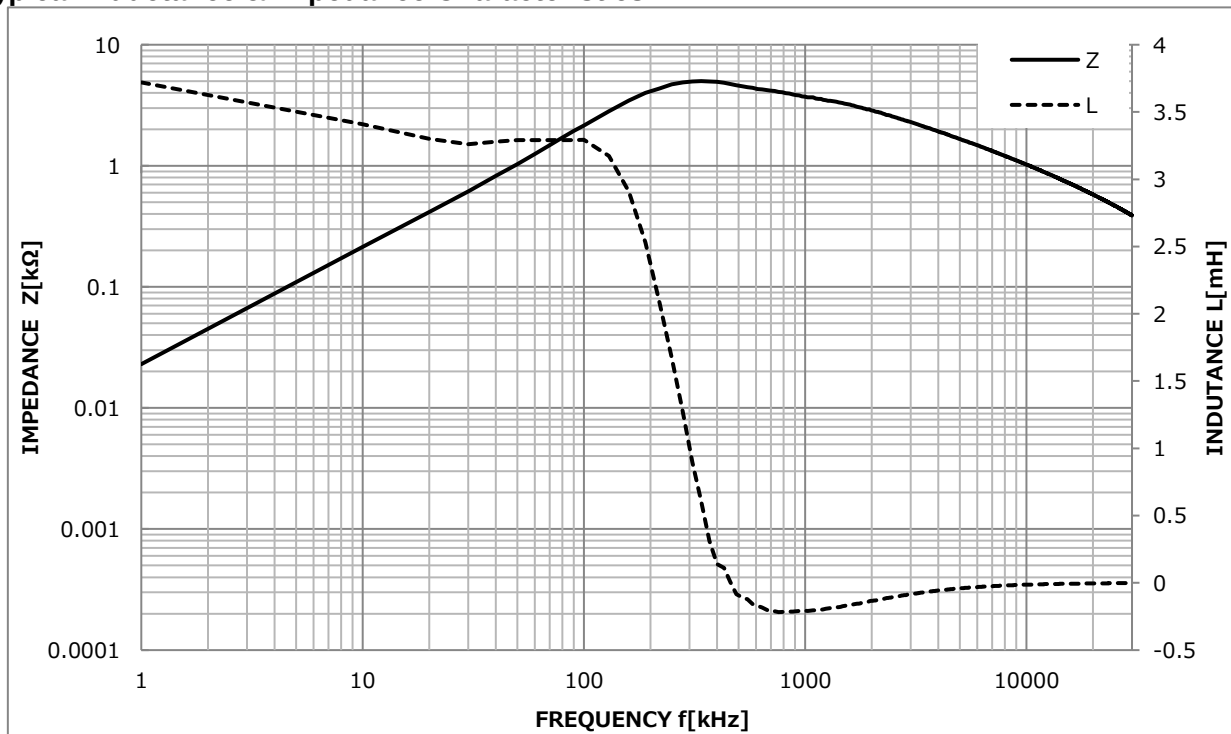
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④,⑤-⑥]	2mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④,⑤-⑥]	2.15 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④,⑤-⑥]	8.5 mΩ typ. 10.0 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②,③-④,⑤-⑥]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②,③-④,⑤-⑥]	>100MΩ	
Creepage/clearance	-	[①-②,③-④,⑤-⑥]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	59 x 35 x 57	110 g

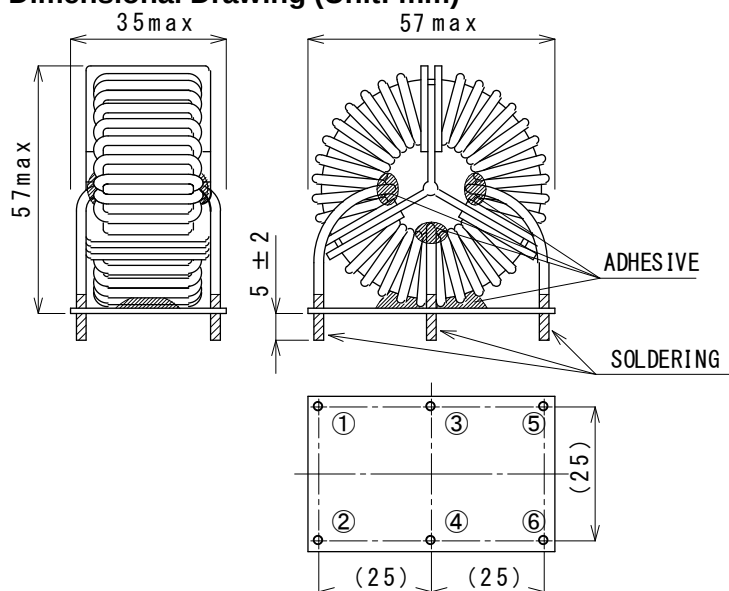
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:

Larger than: $\Phi 1.8$

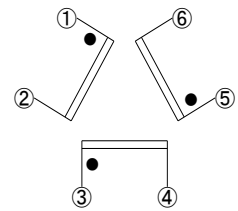
CMY37V-16215R0 1.6mH/15A

CM Series Three Phase Ferrite Core Common Choke Coil

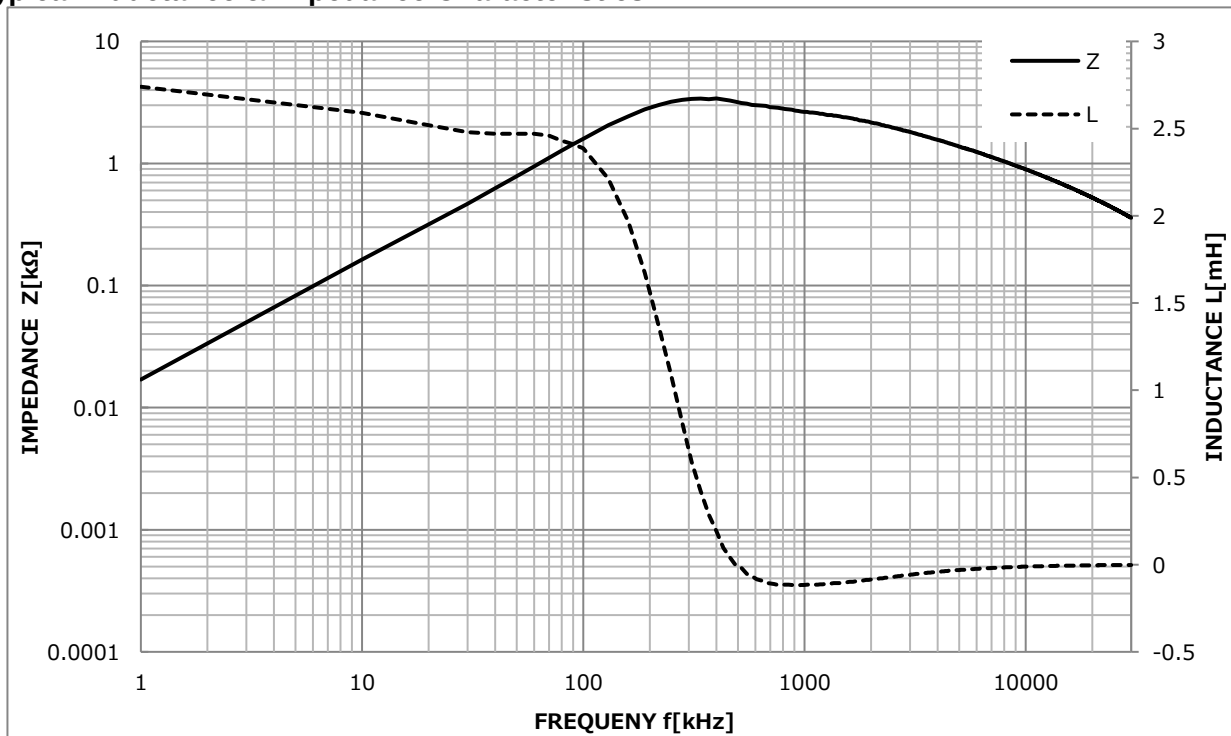
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④,⑤-⑥]	1.6mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④,⑤-⑥]	1.60 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④,⑤-⑥]	5.5 mΩ typ. 7.0 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②:③-④:⑤-⑥]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②:③-④:⑤-⑥]	>100MΩ	
Creepage/clearance	-	[①-②:③-④:⑤-⑥]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	59 x 35 x 57	120 g

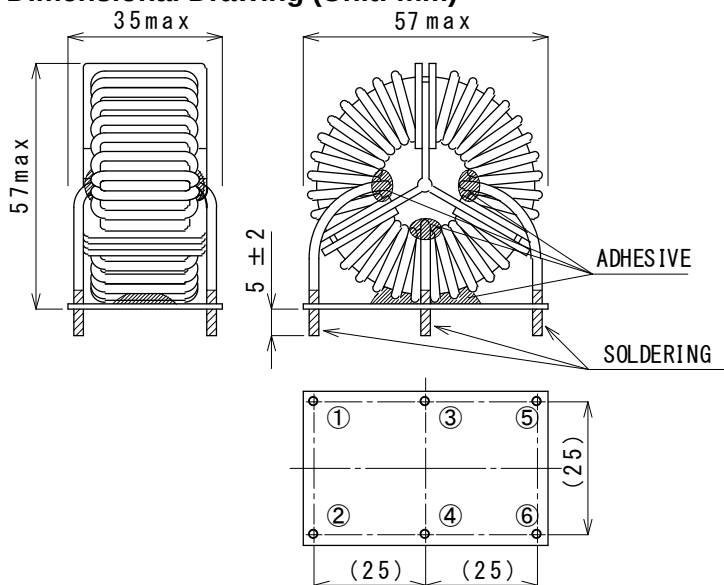
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:

Larger than: $\Phi 2.1$

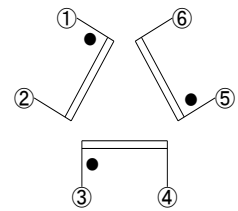
CMY37V-70210R0 0.7mH/20A

CM Series Three Phase Ferrite Core Common Choke Coil

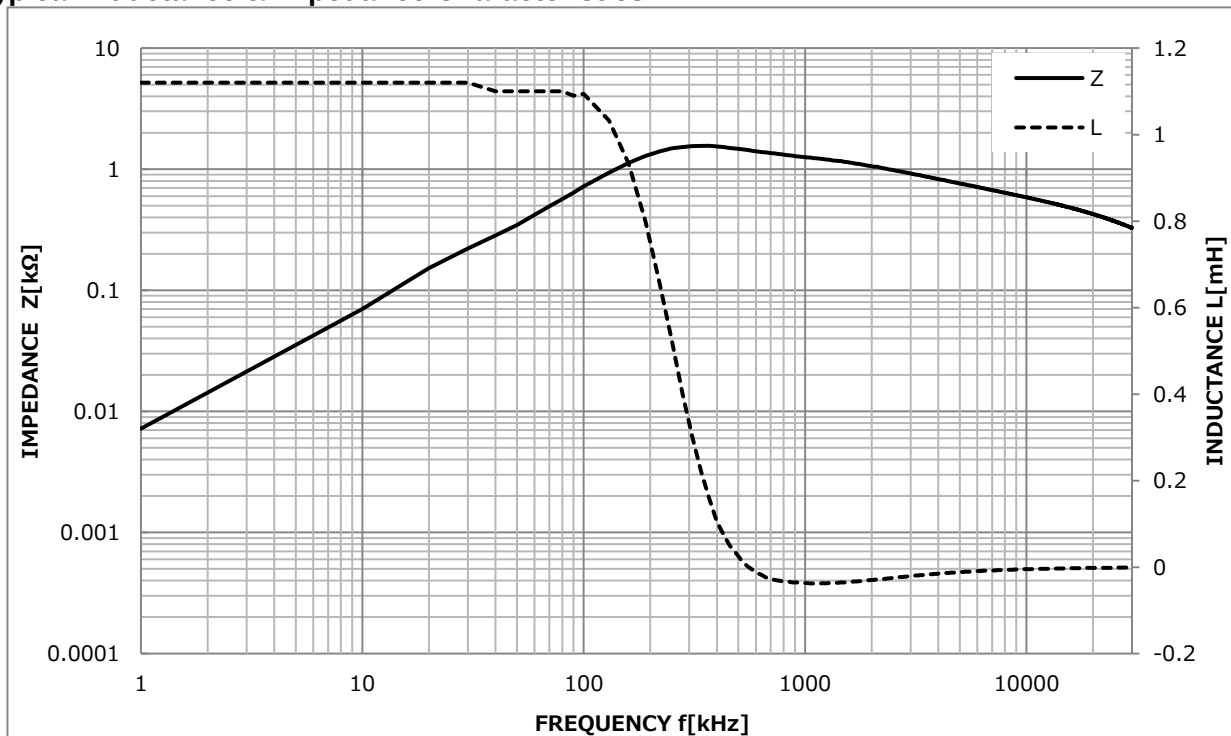
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④,⑤-⑥]	0.7mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④,⑤-⑥]	0.70 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④,⑤-⑥]	3.0 mΩ typ. 4.0 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②:③-④:⑤-⑥]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②:③-④:⑤-⑥]	>100MΩ	
Creepage/clearance	-	[①-②:③-④:⑤-⑥]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	59 x 35 x 57	120 g

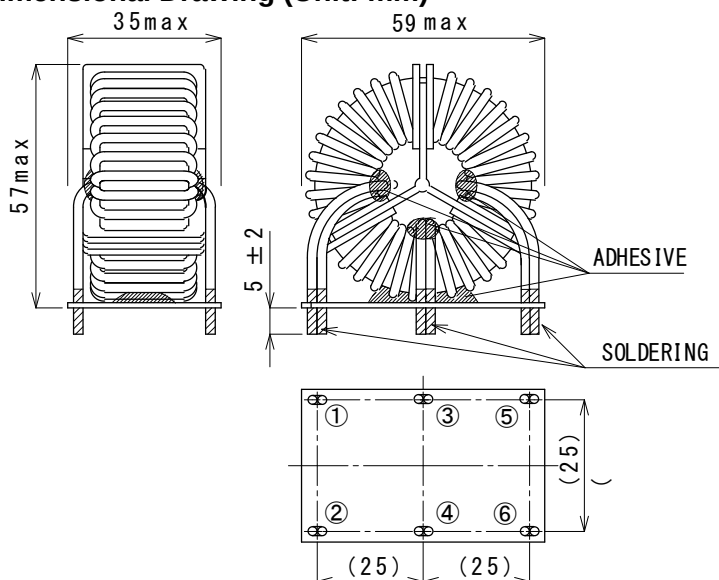
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:

Larger than: 1.8x3.6

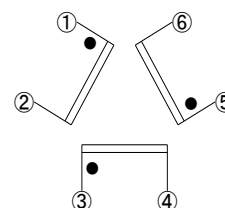
CMY37V-40130R0 0.4mH/30A

CM Series Three Phase Ferrite Core Common Choke Coil

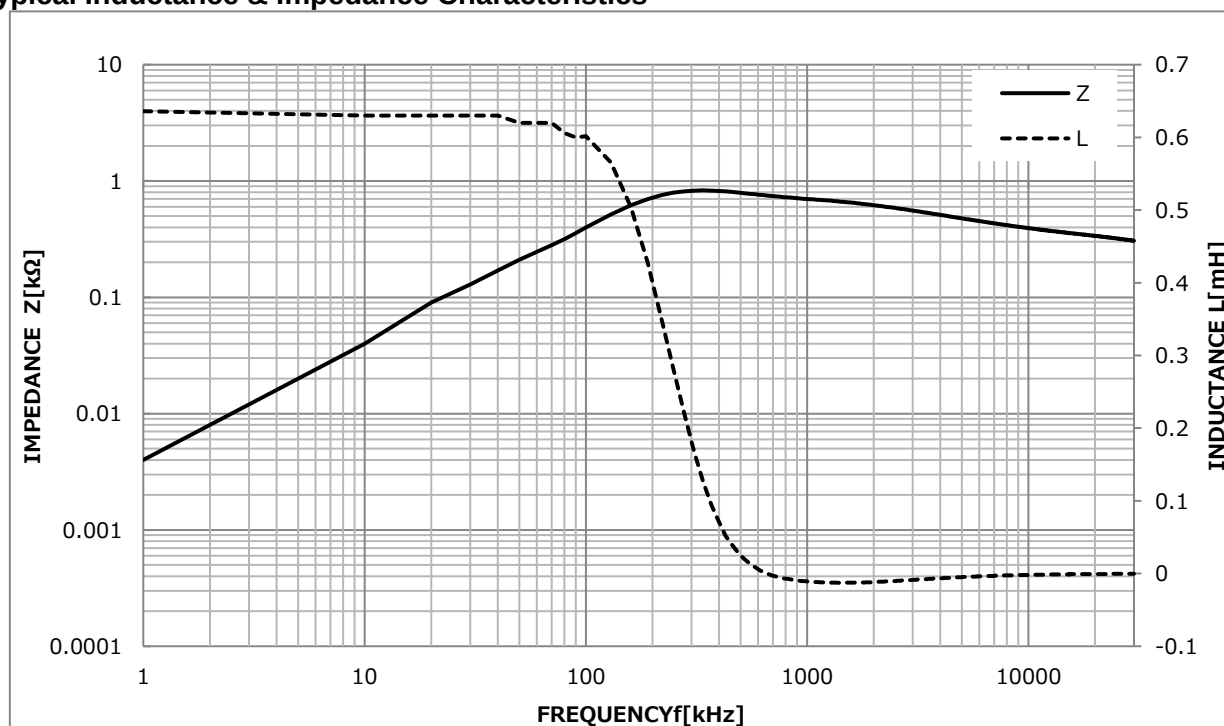
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④,⑤-⑥]	0.4mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④,⑤-⑥]	0.40 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④,⑤-⑥]	1.5 mΩ typ. 2.0 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②,③-④,⑤-⑥]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②,③-④,⑤-⑥]	>100MΩ	
Creepage/clearance	-	[①-②,③-④,⑤-⑥]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	59 x 35 x 57	125 g

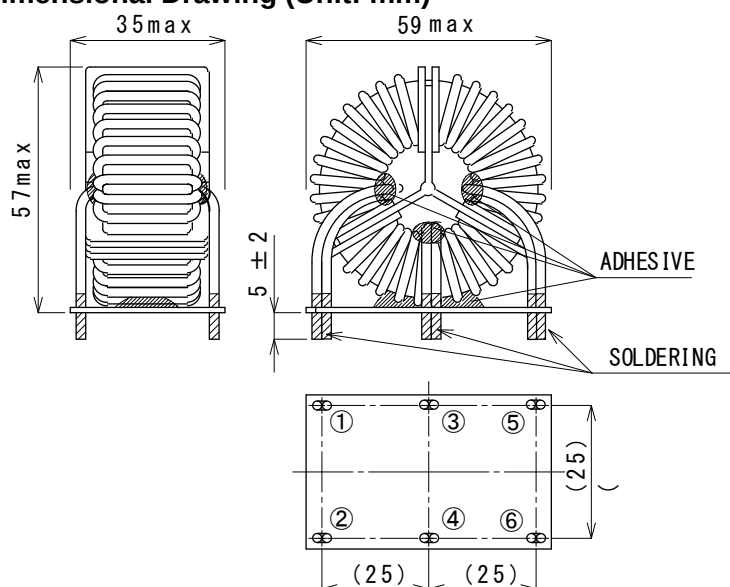
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:

Larger than: 2.1x4.2



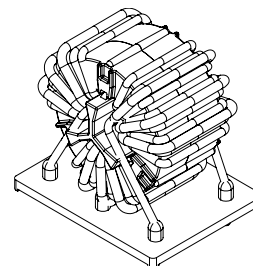
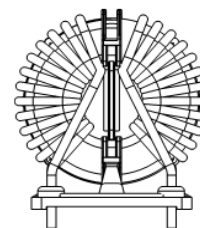
Amorphous Core Common Choke Coil

Features

- 5~90A, Single phase, 3-phase
- Amorphous core
- Realizes effective noise reduction at AM radio band
- Compact dimension
- PCB mounting compatible (Vertical or Horizontal)
- Insulation grade: Class B (130℃)
- Operating temperature range : -40℃~120℃

Typical Application

- Application Fields
 - ・ UPS
 - ・ PV inverter
 - ・ Air conditioner
 - ・ APF/SVG
 - ・ PFC rectifier
 - ・ EV/HEV
 - ・ High power battery charging system



Three phase List (PCB V-Mounting)

No.	P/N	Rated Current	L(mH) Min.	DCR TYP.	Wire Size	Dimension MAX (mm)	Weight TYP.	Page	remarks
		(A)	10KHz	at 25℃ (mΩ)	(mm)	L×W×H	(g)		
1	ACY37V-10210R0	10	1.00	13.0	Φ1.5	59×35×57	130	P9	3-phase
2	ACY37V-50115R0	15	0.50	6.5	Φ1.8	59×35×57	135	P10	

All characteristics specification may be change without noticing. Products will be provided according to customer's Submission of Specification.

All Rights are Reserved by Tamura Corporation of China

Confidential and Proprietary Information of Tamura corporation

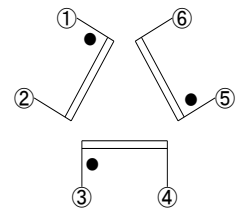
ACY37V-10210R0 1mH/10A

ACM Series Three Phase Amorphous Core Common Choke Coil

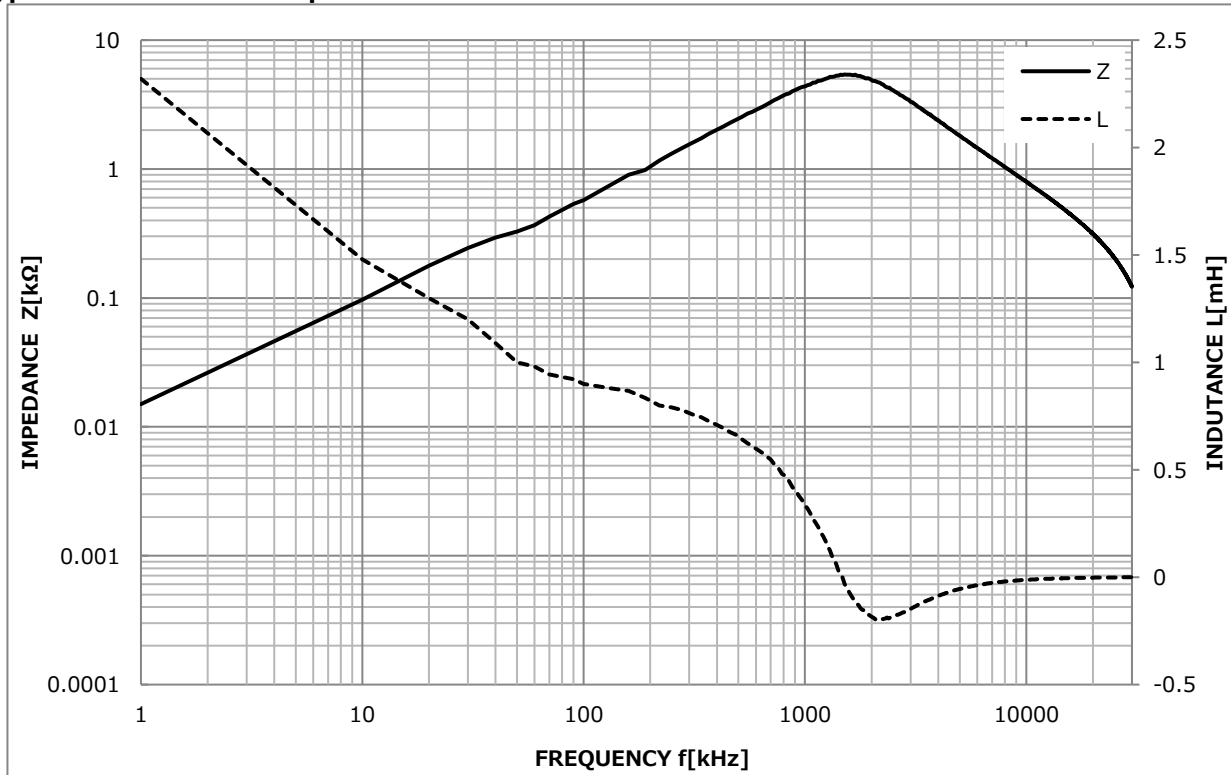
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④,⑤-⑥]	1mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④,⑤-⑥]	0.90 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④,⑤-⑥]	13.0 mΩ typ. 15.0 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②,③-④,⑤-⑥]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②,③-④,⑤-⑥]	>100MΩ	
Creepage/clearance	-	[①-②,③-④,⑤-⑥]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	59 x 35 x 57	130 g

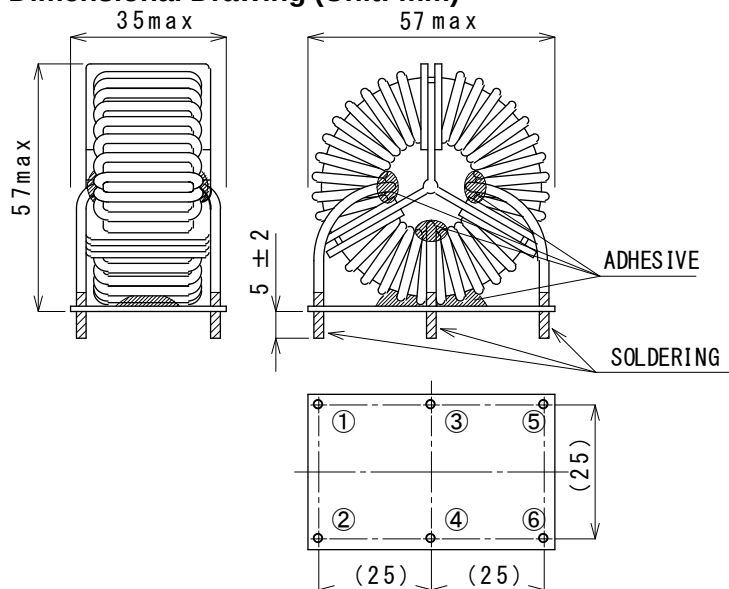
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:

Larger than: $\Phi 1.8$

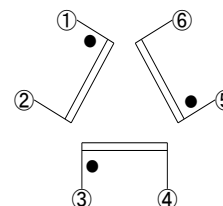
ACY37V-50115R0 0.5mH/15A

ACM Series Three Phase Amorphous Core Common Choke Coil

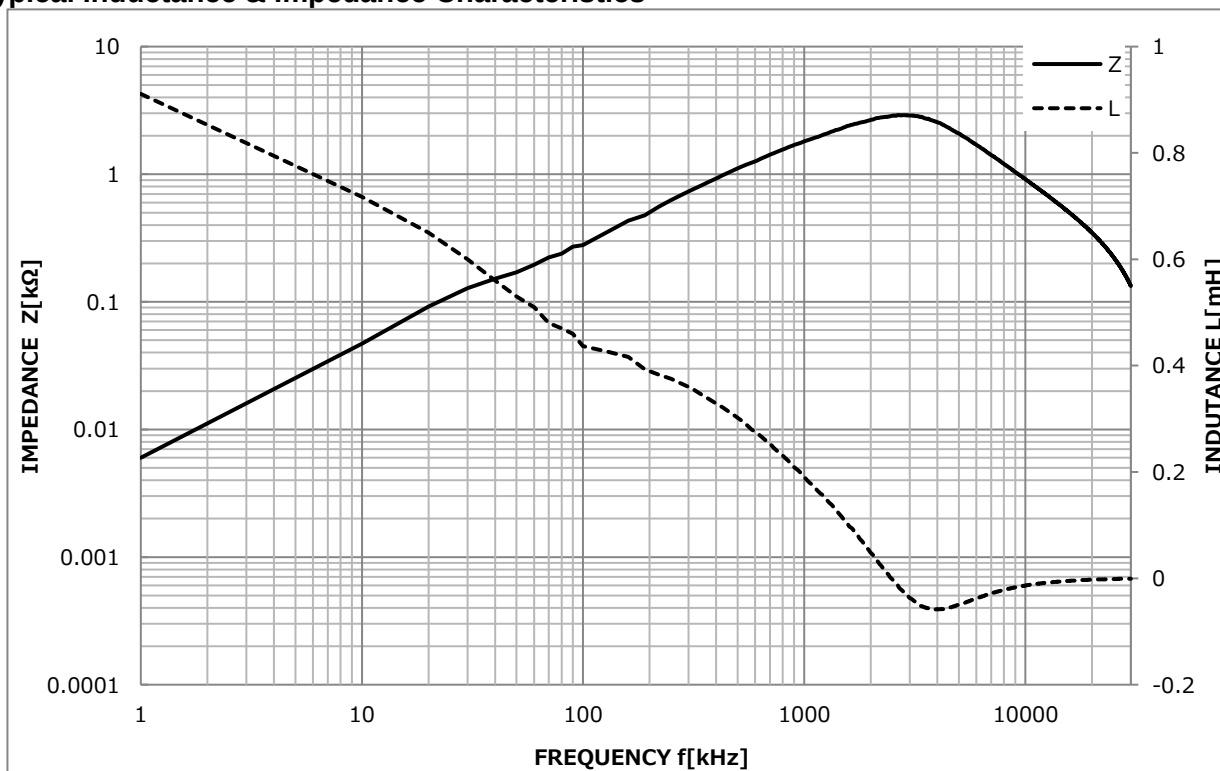
Electric Characteristics & Specification

Items	Testing Condition	Testing Point	Specification	
Common inductance	Agilent E4980A, at 1V	[①-②,③-④,⑤-⑥]	0.5mH Min at 10KHz	
Impedance	HIOKI LCR 3535, at 1V	[①-②,③-④,⑤-⑥]	0.45 KΩ typ.at 100KHz	
DC Resistor	HIOKI 3541	[①-②,③-④,⑤-⑥]	6.5 mΩ typ. 8.0 mΩ max.	
Dielectric strength	EXTECH 7142, <2mA	[①-②,③-④,⑤-⑥]	>2KVac, 1min	
Insulation resistance	EXTECH 7142, 500Vdc	[①-②,③-④,⑤-⑥]	>100MΩ	
Creepage/clearance	-	[①-②,③-④,⑤-⑥]	2.0 mm / 2.0 mm	
Insulation grade	Operating temp.	Storage temp.	Dimension (mm ³)	Typical weight
Class B	-40℃～+120℃	-40℃～+85℃	59 x 35 x 57	135 g

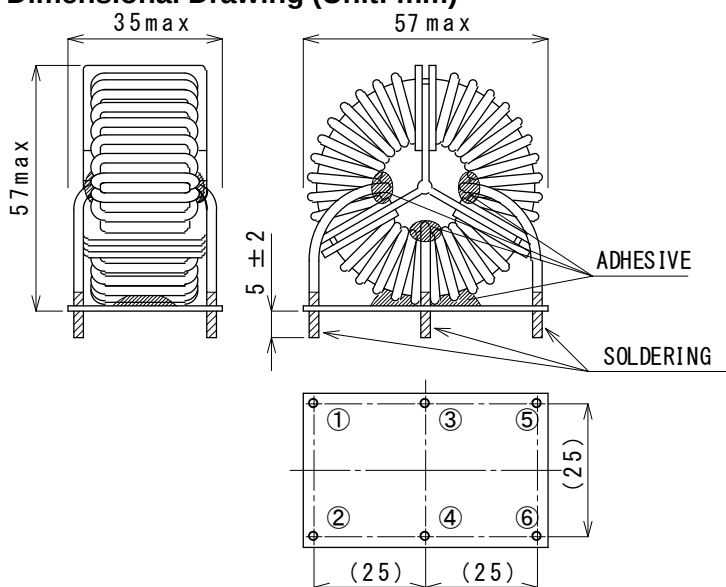
Schematic diagram



Typical Inductance & Impedance Characteristics



Outline Dimensional Drawing (Unit: mm)



Recommended PCB Drilling Hole Size:

Larger than: $\Phi 2.1$