

Common Mode Chokes

For three-phase AC power lines

Three-phase FM-A coils

FM-A series three-phase common mode chokes are cost economical version of FM series (P.13) that use a new manufacturing process and new structure.

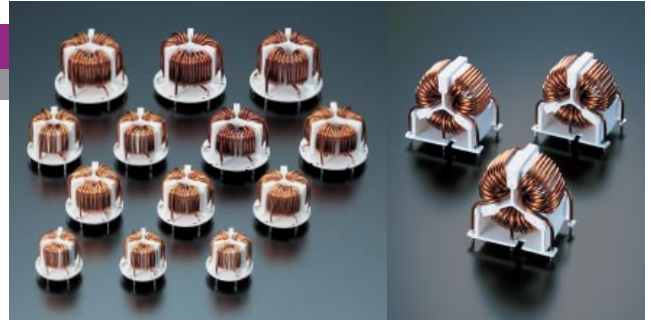


Table 7. Standard Specifications

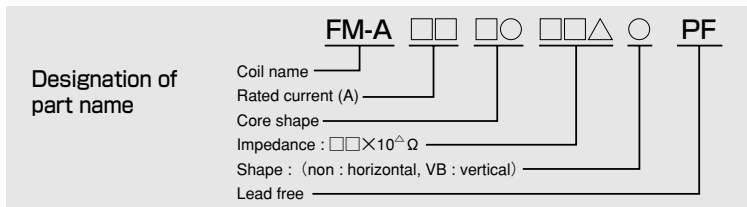
Item	Specification
Rated voltage	AC250V
Insulation voltage rating	AC2kV for 1min. or AC2.4kV for 3 sec. (line-line)
Insulation resistance	Over 100MΩ after applying DC500V for 1min. (line-line)
Insulation grade	Class B (130°C)
Temperature rise	*60°C
Operating temperature range	-40°C – +130°C (including temperature rise of core)

- No Ozone Layer Depleting Chemicals are used in these products or in their manufacturing process.
- * Note 1: The temperature rise in the above table is a projected value based on temperature rise by the heat of the coil when the rated current (DC or 50/60Hz) in the table below is conducted.
- * Note 2: The temperature rise is affected by the mounting condition on the circuit board and the amount of harmonic distortion on the load current. Please make sure the temperature of the coil and the terminals not to exceed the operating temperature range.

Table 8. Product code, part name and specifications

Product code	P/N	Rated current (A)	Z (kΩ) 100kHz MIN.	L (mH) 100kHz REF.	Wire diameter (mm)	Finished dimensions (mm)					Weight (g) TYP.	DC resistance (mΩ) MAX.	Shape
						A MAX.	B MAX.	C MAX.	F REF.	G REF.			
F1AH0737	FM-A051T502PF	5	5.0	5.9	0.9	35	28	—	30	15	40	36	Fig.26
F1AH0728	FM-A081T202PF	8	2.0	2.3	1.1	35	28	—	30	15	39	17	Fig.26
F1AH0738	FM-A082T852PF	8	8.5	10.1	1.3	45	35	—	40	20	103	26	Fig.26
F1AH0739	FM-A102T602PF	10	6.0	7.1	1.5	45	35	—	40	20	109	17	Fig.26
F1AH0893	FM-A152T232PF	15	2.3	2.7	1.7	45	35	—	40	20	99	8	Fig.26
F1AH0740	FM-A153T452PF	15	4.5	5.3	1.8	56	38	—	50	25	153	11	Fig.26
F1AH0733	FM-A203T242PF	20	2.4	2.9	2.1	56	38	—	50	25	154	6	Fig.26
F1AH0741	FM-A204T442PF	20	4.4	5.3	2.2	63	46	—	56	28	236	9	Fig.26
F1AH0734	FM-A253T152PF	25	1.5	1.8	2.4	56	38	—	50	25	158	4	Fig.26
F1AH0735	FM-A254T312PF	25	3.1	3.7	2.4	63	46	—	56	28	236	6	Fig.26
F1AH0736	FM-A304T212PF	30	2.1	2.4	2.6	63	47	—	56	28	232	5	Fig.26
F1AH0881	FM-A082T852VBPF	8	8.5	10.1	1.3	45	33	45	20	26	105	26	Fig.27
F1AH0882	FM-A102T602VBPF	10	6.0	7.1	1.5	45	33	45	20	26	111	17	Fig.27
F1AH0883	FM-A152T232VBPF	15	2.3	2.7	1.7	45	33	45	20	26	101	8	Fig.27

- UL94 V-0 certified resin is used for these cores and base plates.
- Lead-free solder is used for the winding coils.
- Custom made products are available.



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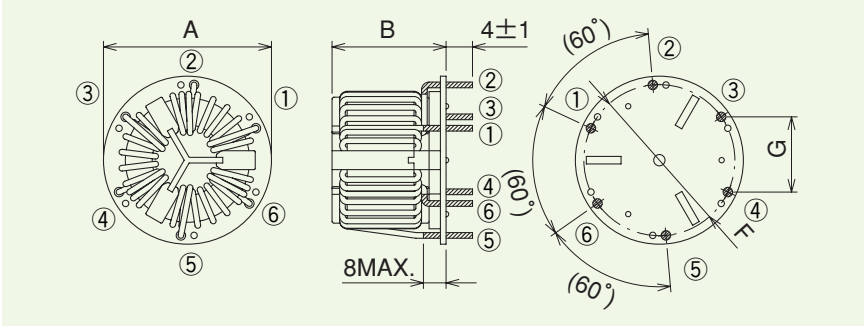


Figure 26. FM-A□□□T□□□PF

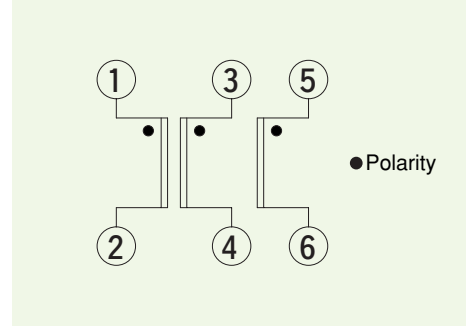


Figure 28. Circuit diagram

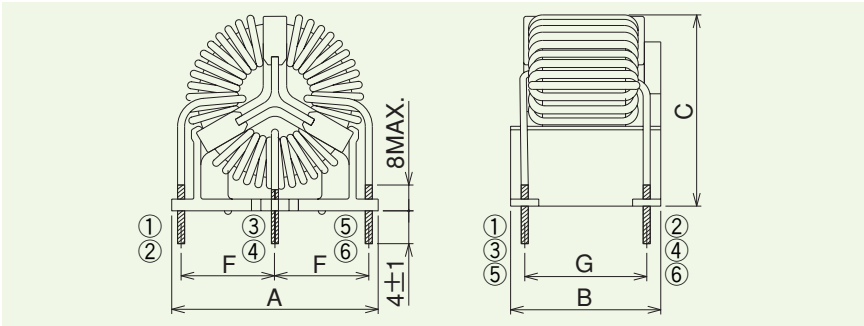


Figure 27. FM-A□□□T□□□VBPF

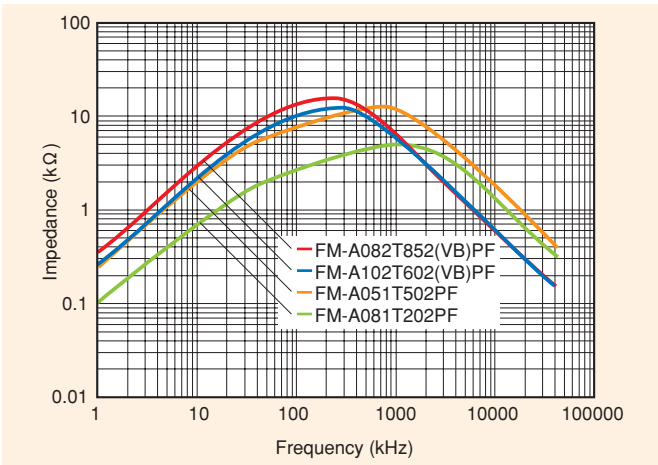


Figure 29. Frequency dependence of impedance for three-phase FM-A coils with rated current 5A-10A

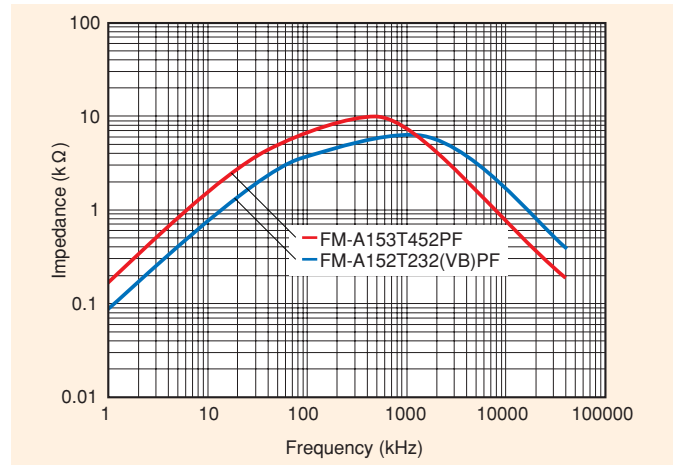


Figure 30. Frequency dependence of impedance for three-phase FM-A coils with rated current 15A

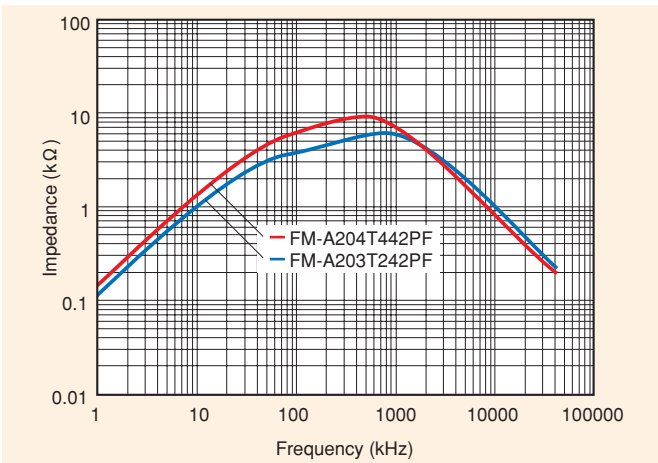


Figure 31. Frequency dependence of impedance for three-phase FM-A coils with rated current 20A

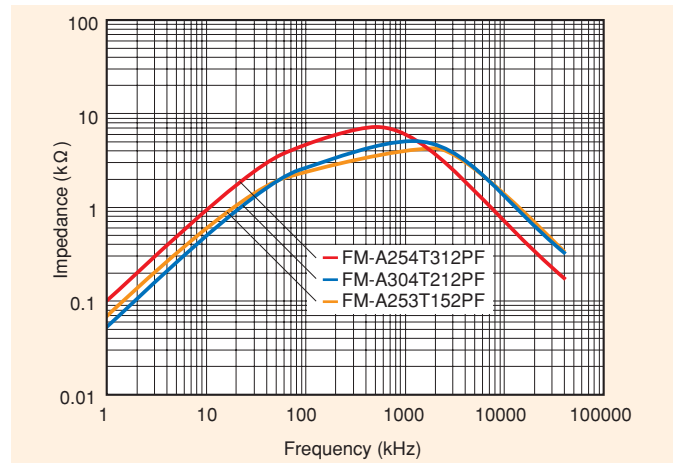


Figure 32. Frequency dependence of impedance for three-phase FM-A coils with rated current 25A-30A

