

SPECIFICATIONS

(R 0)

151-ELF15N002A

Name

LINE FILTER

Customer's No

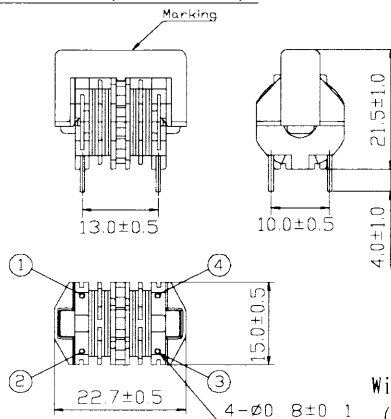
Matsushita Code

ELF15N□□□□

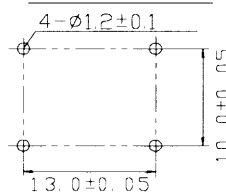
ELF15N□□□□

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APPEARANCE & DIMENSIONS (Unit : mm)



MOUNTING DETAILS



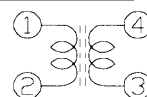
APPLICABLE SAFTY STANDERD (Reference)

- E.A.M.S Law of Japan (DENKI YOHIN)
- UL 1270, 1409, 1410, 1492, 1950, 6500
- IEC 60065, 60950
- CSA C22.2 Na1, Na950

INSULATION DISTANCE

- Bobbin Thickness 0.8mm min.
- Space & Creepage Distance
 - Between Coil & Coil 3.2mm min.
 - Between Coil & Core 1.6mm min.

CONNECTIONS



Wire type · Wire size: Refer to each SPEC
(151-ELF15N002A (2-2))

ELECTRICAL CHARACTERISTICS

- Operating Temperature Range : -20°C to 115°C (Including Self-Temperature-Rise)
(In case of UL, CSA : -20°C to 100°C , Including Self-Temperature-Rise)
- Inductance (L1 & L2) : Refer to each Specifications (151-ELF15N002A (2-2))
- L1 & L2 Difference (|L1-L2|) : Refer to each Specifications (151-ELF15N002A (2-2))
- DC Resistance (RDC) : Refer to each Specifications (151-ELF15N002A (2-2))
- Rated Current (Ir) : Refer to each Specifications (151-ELF15N002A (2-2))
- Rated Voltage : 250 V [rms] max. (50Hz, 60Hz)
- Temperature-Rise : 45 K max. (Passing Ir for 3±1h.)
- Insulation Resistance (IR) : 100 MΩ min. (at DC500V between Coil & Coil and Coil & Core.)
- Withstanding Voltage : Shall withstand AC2000V for 1 minute applied between Coil & Coil and Coil & Core.
(For manufacture line , apply 120% of specified Voltage for 2 seconds instead of above conditions)
- Moisture Life : Appearance, Structure and Withstanding Voltage shall not be remarkably damaged after stored for 500±6 hours of exposure to 90 to 95% RH at 60±2°C with AC250V loaded between Coil and Coil and left for 1 hour in room conditions.
- Heat Life : Appearance, Structure and Withstanding Voltage shall not be remarkably damaged after stored for 500±6 hours at 85±2°C with AC250V loaded between Coil and Coil and left for 1 hour in room conditions.
- Thermal Shock : Appearance, Structure and Withstanding Voltage shall not be remarkably damaged after 5 cycles of storage at -25±3°C for 30 minutes and 85±2°C for 30 minutes left for 1 hour in room conditions.
- Cold Resistances : Appearance, Structure and Withstanding Voltage shall not be remarkably damaged after stored for 96±4 hours at -25±3°C and left for 1 hour in room conditions.
- Heat Resistance : Change of inductance shall be within ±15% and Appearance, Structure and Withstanding Voltage shall not be remarkably damaged after stored for 96±4 hours at 85±2°C and left for 1 hour in room conditions.
- Moisture Resistance : Change of inductance shall be within ±15% and Appearance, Structure and Withstanding Voltage shall not be remarkably damaged after stored for 96±4 hours exposure to 90 to 95% RH at 60±2°C and left for 1 hour in room conditions.

MECHANICAL CHARACTERISTICS

- Vibration Resistance : Appearance and Structure shall have no abnormality after vibration at the frequency varying uniformly between the approximate limits of 10 and 55 Hz and the amplitude of 1.5 mm for 2 hours in each of 3 mutually perpendicular directions.
- Terminal Strength : The terminal shall not be remarkably damaged by pulling and pushing of 10N {about 1.02kgf} for 30±5 seconds in the axis directions.
- Solderability : Solder shall be attached uniformly around the dipped portion after dipping into solder at 230±5°C for 2±0.5 seconds.
- Solder Heat Resistance : The electrical and mechanical characteristics shall not be deteriorated after dipping into solder at 270±5°C for 5±0.5 seconds up to 1.0 to 1.5 mm from attachment surface.

MARKING

- Product : Customer's Code (Refer to each SPEC) , Date Code of manufacture and Trade Mark (⊗ Mark) shall be indicated.
- Packing : Part Name , Product Code , Quantity and Specified Item shall be indicated.

CAUTION

The product dropped shall not be used.
There is a risk of safety trouble due to a smoking or deformation if this product is used under the abnormal condition :
at 2 times of rated current in 2 minutes.

May.28.2002

No	Date	Revisions	Checked	Designed	Approved	Checked	Designed
					S. Mori moto		

MATSUSHITA ELECTRONIC COMPONENTS CO., LTD.

SPECIFICATIONS		(R O) 151-ELF15N002A
Name LINE FILTER		
Customer's No	Matsushita Code	
ELF15N□□□□	ELF15N□□□□	2 - 2

※ Type 15N

Customer's No.	Matsushita Code	Marking	L1&L2	L1&L2 Difference	DCR Resistance Ω (Tolerance±20%) (at 20°C)	Rated Current A[rms] (50Hz) (60Hz)	Reference		Remarks
			mH min.	μH max.			Wire size φ mm	Turns	
			f=1kHz Vosc(rms)=0.1V				2UEW		
ELF15N002A	ELF15N002A	104 02	104.0	800	7.543	0.2	0.16	267	
ELF15N003A	ELF15N003A	433 03	43.0	500	3.154	0.3	0.20	173	
ELF15N004A	ELF15N004A	263 04	26.0	400	1.966	0.4	0.22	133	
ELF15N005A	ELF15N005A	193 05	19.0	300	1.324	0.5	0.25	114	
ELF15N006A	ELF15N006A	123 06	12.0	270	0.933	0.6	0.26	90	
ELF15N007A	ELF15N007A	103 07	10.0	250	0.762	0.7	0.28	83	
ELF15N008A	ELF15N008A	682 08	6.8	200	0.548	0.8	0.30	68	
ELF15N010A	ELF15N010A	532 10	5.3	180	0.369	1.0	0.35	60	
ELF15N011A	ELF15N011A	402 11	4.0	150	0.308	1.1	0.35	52	
ELF15N013A	ELF15N013A	272 13	2.7	130	0.202	1.3	0.40	43	
ELF15N015A	ELF15N015A	212 15	2.1	110	0.170	1.5	0.40	38	
ELF15N017A	ELF15N017A	172 17	1.7	100	0.126	1.7	0.45	34	
ELF15N022A	ELF15N022A	102 22	1.0	70	0.078	2.2	0.50	26	
ELF15N030A	ELF15N030A	601 30	0.6	60	0.052	3.0	0.55	21	

								May.28.2002	
No.	Date	Revisions	Checked	Designed	Approved	Checked	Designed		
					S. Morimoto	T. Odaka			
MATSUSHITA ELECTRONIC COMPONENTS CO.,LTD.									

Classification

SPECIFICATION (MATERIAL)

No.

151-ELF15NM

Subject

LINE FILTER

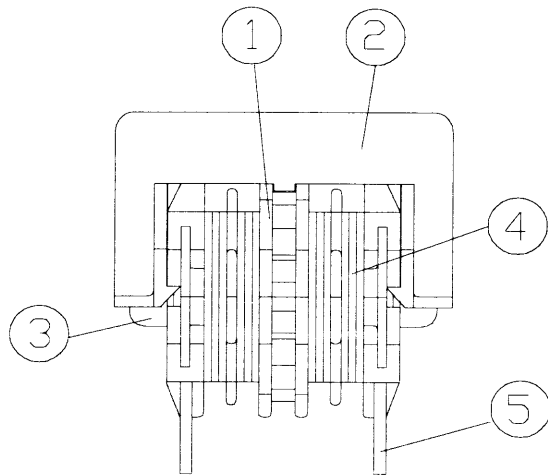
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of

Date

May.22.'01

STRUCTURE



INSULATION DISTANCE

ITEM		DIMENSIONS
Bobbin Thickness		0.8 mm min.
Space or Creepage Distance	Between Coil and Core	1.6 mm min.
	Between Coil and Coil	3.2 mm min.

WITHSTANDING VOLTAGE

ITEM	WITHSTAND VOLTAGE
Between Coil and Core	AC 2kV min. for 1 minute
Between Coil and Coil	

MATERIAL LIST

ITEM	PART NAME	MATERIALS	MANUFACTURE
1	Bobbin	Polybutylene Terephthalate (CN7030 V-0 E213445) (1184G30 V-0 E41797) (KP212G30V0 V-0 E88499) (420SE0 V-0 E121562) (420SE0 V-0 E45587)	WINTech POLYMER LTD. TORAY INDUSTRIES INC. KOLON INDUSTRIES INC. GE PLASTICS AMERICAS GE PLASTICS JAPAN LTD.
2	Cover	Polybutylene Terephthalate (CN7000 V-0 E213445) (1494 V-0 E41797) (KP212V0 V-0 E88499) (310SE0 V-0 E121562) (310SE0 V-0 E45587)	WINTech POLYMER LTD. TORAY INDUSTRIES INC. KOLON INDUSTRIES INC. GE PLASTICS AMERICAS GE PLASTICS JAPAN LTD.
3	Core	Ferrite	OPTIONAL
4	Wire	Polyurethane Enameled Copper Wire	DAIICHI DENCO CO.,LTD. RIKEN ELECTRIC WIRE CO.,LTD. TOTOKU ELECTRIC CO.,LTD. JUNGSHING WIRE CO.,LTD. SUMITOMO ELECTRIC INDUSTRIES LTD. CHANGZHOU ZHONGSHAN WIRE&CABLE CO.,LTD. HITACHI CABLE LTD. SHANGHAI ELECTRIC MACHINE EQUIPMENT FACTORY etc.
5	Pin Terminal	Solder Coated Hardness Copper Ply Wire	OPTIONAL

MATSUSHITA ELECTRONIC COMPONENTS CO.,LTD.

Approved

Checked

Design