

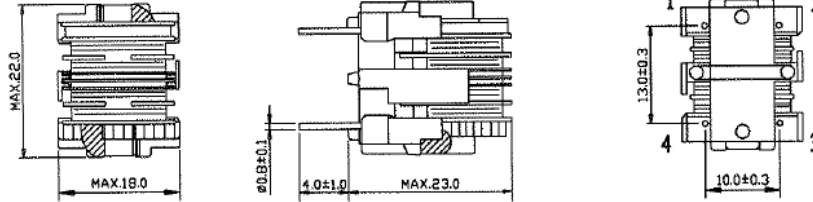


# COMMON MODE LINE FILTERS

## SPECIFICATIONS

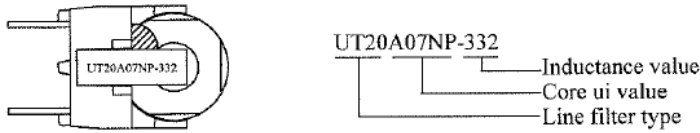
TYPE	UT20
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### 1. DIMENSION (UNIT : mm)

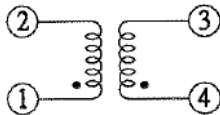


- \* THE LENGTH OF THE TERMINAL PINS DOES NOT INCLUDE SOLDER TIP.
- \* PIN PITCH TO BE MEASURED FROM THE ROOT OF TERMINAL.

### 2. STAMP DESCRIPTION (e.g)

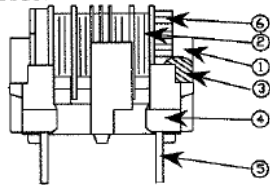


### 3. CONNECTION (BOTTOM VIEW)



"●" indicates winding start.

### 4. CONSTRUCTION



### MATERIAL LIST

No.	PARTS	MATERIAL
①	CORE	FERRITE CORE
		TL07
		A07
		CS72
②	WIRE	POLYURETHANE ENAMELLED COPPER WIRE CLASS 130 OR EQUIVALENT.
③	ADHESIVE	EPOXY RESIN (XNR3614)
④	BASE	PHENOLIC (T375J)
⑤	LEAD PIN	CP WIRE(TIN PLATED)
⑥	BOBBIN	POLYBUTYLENE TEREPHTHALATE PBT (QMFZ2 1403G6)
⑦	SOLDER	Sn/Cu, 99.3/0.7
⑧	FLUX	# 6229 OR ALPHA 100 (R)
⑨	INK	STM-3



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### 5. ELECTRICAL CHARACTERISTICS

No.	CEC P/ N	STAMP	INDUCTANCE (m H) (1-2)/(4-3) Min.	LEAKAGE INDUCTANCE ( $\mu$ H)(3-4 short) (1-2) Max.	D.C.R. ( $\Omega$ ) (1-2)/(4-3) Max.	RATED CURRENT (A) (2-3 short) (1-4) Max.
01	UT20A07NP-102	UT20A07NP-102	1.0	30	115m	1.85
02	UT20A07NP-182	UT20A07NP-182	1.8	50	160m	1.50
03	UT20A07NP-332	UT20A07NP-332	3.3	90	270m	1.25
04	UT20A07NP-472	UT20A07NP-472	4.7	120	0.41	0.90
05	UT20A07NP-682	UT20A07NP-682	6.8	180	0.60	0.75
06	UT20A07NP-103	UT20A07NP-103	10.0	250	0.90	0.60
07	UT20A07NP-183	UT20A07NP-183	18.0	450	1.45	0.45
08	UT20A07NP-333	UT20A07NP-333	33.0	750	2.30	0.40
09	UT20A07NP-473	UT20A07NP-473	47.0	1100	3.80	0.25
10	UT20A07NP-683	UT20A07NP-683	68.0	1700	5.80	0.20

\* TESTING INSTRUMENT

INDUCTANCE : HP 4284A OR EQUIVALENT.

D.C.R. : KEITHLEY 580 MICRO OHM METER OR EQUIVALENT.

LEAKAGE INDUCTANCE : HP 4284A OR EQUIVALENT.

RATED CURRENT: HP E3632A , HP 34401A OR EQUIVALENT.

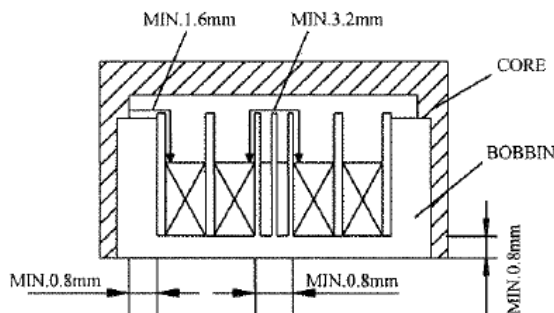
HI-POT: COIL TO COIL : AC 2.0kVrms 50/60Hz 2mA 1MINUTE

COILS TO CORE : AC 2.0kVrms 50/60Hz 2mA 1MINUTE

\* TESTING FREQUENCY OF INDUCTANCE: at 1kHz/0.1V

\* RATED CURRENT: THE CURRENT WHEN THE TEMPERATURE OF COIL IS INCREASED

BY 40°C (Ta = 25°C)



\* SPACE, CREEPAGE DISTANCE BETWEEN COIL AND COIL: MIN. 3.2mm.

\* SPACE, CREEPAGE DISTANCE BETWEEN COIL AND CORE: MIN. 1.6mm.

**AEL COILS ELECTRONIC CO., LTD.**



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### 6. GENERAL CHARACTERISTICS

\* STANDARD TESTING CONDITIONS:

UNLESS OTHERWISE SPECIFIED, THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MEASUREMENTS AND TESTS ARE AS FOLLOWS: AMBIENT TEMPERATURE: 15°C TO 35°C. RELATIVE HUMIDITY : 25% TO 85%. AIR PRESSURE : 86kPa TO 106kPa.

IF THERE IS ANY DOUBT ABOUT THE RESULTS, MEASUREMENT SHALL BE MADE WITHIN THE FOLLOWING LIMITS: AMBIENT TEMPERATURE: 20°C±1°C. RELATIVE HUMIDITY : 63% TO 67%. AIR PRESSURE : 86kPa TO 106kPa.

No.	ITEMS	TEST CONDITIONS	SPECIFICATION
1	DIELECTRIC WITHSTANDING VOLTAGE	COIL TO COIL : AC 2.0kVrms 50/60Hz 2mA 1MINUTE COILS TO CORE : AC 2.0kVrms 50/60Hz 2mA 1MINUTE	NO FAILURE
2	INSULATION RESISTANCE	COIL TO COIL : DC 500V COILS TO CORE : DC 500V	MIN. 100 MΩ
3	OPERATING TEMPERATURE STORAGE TEMPERATURE		-25 ~ +85°C (INCLUDING COIL TEMPERATURE RISE) -40 ~ +85°C
4	TERMINAL STRENGTH	APPLIED A STATIC PULLING FORCE OF 5N IN A DIRECTION PARALLEL TO THE LEAD TERMINALS FOR 60±5 SECONDS.	NO TERMINAL DISCONNECTION OR LOOSENING
5	RESISTANCE TO SOLDERING HEAT TEST	FIX THE SAMPLES ON A 1.6mm THICKNESS PCB, THEN DIP THE SAMPLE LEADS UP TO THE PCB INTO A SOLDERING BATH OF 260±5°C FOR 5±1 SECONDS.	NO MECHANICAL BREAKAGE. DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±10%
6	SOLDERABILITY TEST	IMMERSE THE TERMINAL IN FLUX FOR 5 SECONDS. THEN DIP THE TERMINAL INTO A SOLDERING BATH OF 235±5°C FOR 2±0.5 SECONDS.	OVER 90% OF THE SURFACE BEING IMMersed SHALL BE COVERED WITH NEW SOLDER UNIFORMLY.
7	VIBRATION TEST	AMPLITUDE:1.5mm P-P FREQUENCY:10~55~10Hz (1 MINUTE PER CYCLE) DURATION:2 HOURS IN EACH OF X,Y,Z AXIS (TOTAL 6 HOURS)	DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±10%
8	SHOCK TEST	PEAK ACCELERATION: 981m/s <sup>2</sup> DURATION OF PULSE:10ms SHOCK TIMES: 3 TIMES IN EACH OF X, Y, Z AXIS.(TOTAL 9 TIMES)	DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±10%
9	HUMIDITY TEST	TEMPERATURE: 40°C±2°C HUMIDITY: 90%~95%RH DURATION:96±4 HOURS.	DEVIATION RELATIVE TO INITIAL VALUE: L: WITHIN ±10%

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