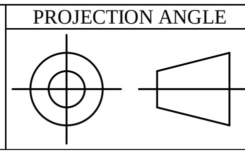
CUSTOMER PRODUCT SPECIFICATION

MODEL NBR	:	HM00-04095LF
CUSTOMER PART NBR	:	N/A
CUSTOMER DWG NBR / REV / DATE	:	N/A
CUSTOMER CODE	:	A00030

REV	CHANGE DETAILS	ECN #	DATE	PREPARED	APPD
A	Preliminary release	C9263	17/06/09	J.THIVA	CS TEOR

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN mm	PROJECTION ANGLE	SCALE
TOLERANCES: WHOLE NO ± 1.0 DECIMAL .X ± 0.5 .XX ± 0.3		1: N.T.S

DOCUMENT NBR	:	00-04095LF	
TITLE	:	TRANSFORMER	
REV	:	A	PAGE: 1 OF 6

1. MECHANICAL OUTLINE

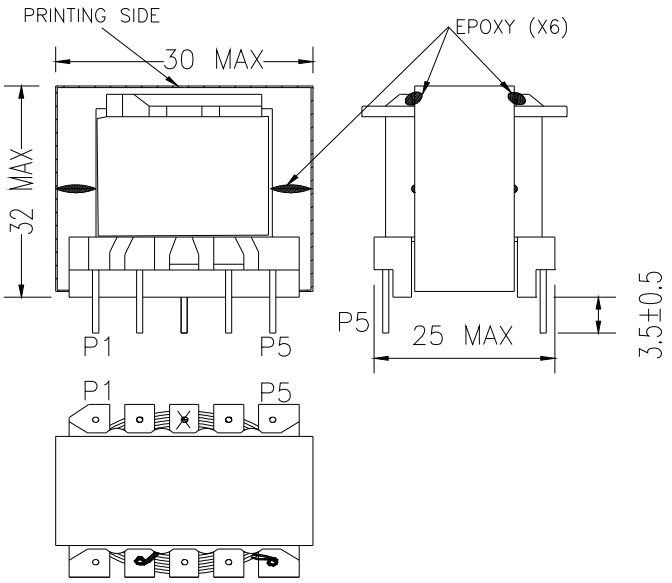


FIGURE 1. MECHANICAL OUTLINE

1.1 RECOMMENDED PCB PATTERN

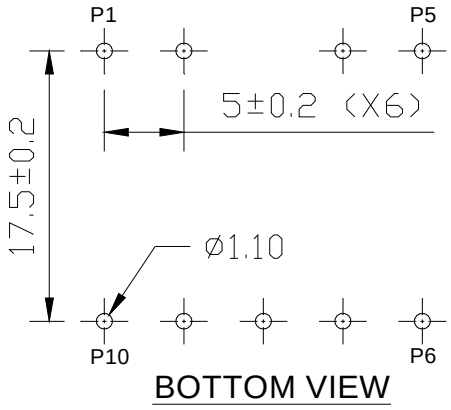


FIGURE 2. RECOMMENDED PCB PATTERN

2 ELECTRICAL SCHEMATIC

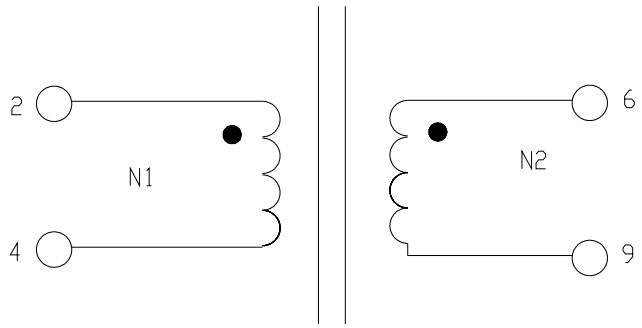


FIGURE 3. ELECTRICAL SCHEMATIC

2.1 TURN RATIO

NO	TURN RATIO	TERMINALS	RATIO
2.1.1	X-X / 2-4	6-9	2.67 ref

2.1 WINDING CONSTRUCTION

NO	WINDING	TERMINAL	TURNS	WIRE SIZE/ INSULATION	REMARK
2.1.1	N1	2 - 4	6	Wire NELCC 650/#44	Wind in 1 layer , anti clockwise view from pin
2.1.2			3	Tape-p	
2.1.3	N2	6-9	16	160/#44 , ETFE insulated wire	Wind in 1 layer , anti clockwise view from pin
2.1.4			2	Tape-p	

3 FINISH

[ ] UNVARNISH	[ ] DIP VARNISH	[ ] VACUUM VARNISH
[ ] POTTING	[X] EPOXY	[X] LEAD FREE

4 MARKING

[X] BI LOGO	[X] DATE CODE	[X] COUNTRY OF ORIGIN
[ ] HI-POT	[X] BI PART NBR	[ ] CUSTOMER PART NBR

5 ELECTRICAL SPECIFICATION

NO	PARAMETER	TEST CONDITION	TERMINAL	MIN	TYP	MAX	UNIT
5.1	Ind	200KHz, 1Vac	Pin (2-4)	64			µH
5.2	Leakage Ind	200KHz, 1Vac	Pin (2-4), short all secondary		0.3		µH
5.3	Capacitance	200KHz, 1Vac	Pri-sec		33		pF
5.4	DCR	@ 25°C	Pin (2-4)		4.6		mΩ
5.5	DCR	@ 25°C	Pin(6-9)		46.5		mΩ
5.6	Turn Ratio / Phase		As per schematic				
5.7	Isolation test	1500Vrms , 1 min	Pri to Sec			1	mA

6 MATERIAL LIST

NO	ITEM	MATERIAL DESCRIPTION	SOURCE	UL FILE
6.1	Bobbin	Bobbin ER28 vertical , Phenolic Eg : YC-2811	Chang Chun	E59481(S)
6.2	Core ER28	Ferrite core ER28 Eg : 3C96 Eg : F48	Various Ferroxcube MMG	N/A
6.3	Tube Teflon	Extruted teflon tubing	Various Zeus Markel Atlantic Great Holding	 E64007 E20344 E76209 E156256(S)
6.4	Epoxy	Epoxy based adhesive Eg: TB2272 Eg : TB2223L	Various Three bond Three bond	 E172449 N/A
6.5	Magnet Wire	Litz wire, single polyurethane (MW79C), 0.003”ETFE insulated Eg : 160/#44	Various New England Elektrisola	 E132708 E143312
6.6	Magnet Wire	Litz wire, single polyurethane(MW79C), single nylon serve Eg :NELCC 650/#44	Various New England Elektrisola	 E132708 E143312

7 PACKING REQUIREMENT

1 INNER TRAY	32PCS
1 SHIPPING CARTON	192PCS

8 ENVIRONMENTAL

8.1 RESISTANCE TO SOLDERING HEAT

Hand soldering with no preheat, the component leads shall be totally immersed in molten solder , 260±5°C for 10±1 second per MIL-STD-202F, method 210E (refer figure 4 below).

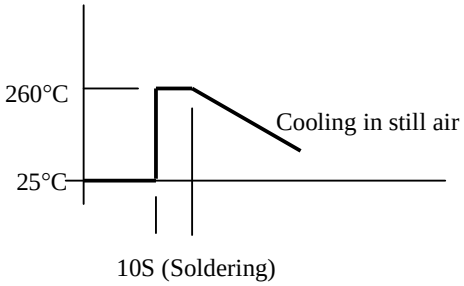


FIGURE 4. HAND SOLDERING

8.2 MARKING PERMENANCY

8.2.1 Mix 1 part of isopropyl alcohol with 3 parts of mineral spirit. Brush 10 strokes on marking. Repeat 3 cycles per MIL-STD-202F, method 215J.

Accept criteria: Markings are still legible after test

8.3 OPERATING AND STORAGE TEMPERATURE

8.3.1 Product operating temperature : -25°C to +85°C

8.4 TERMINAL STRENGTH

8.4.1 After soldering the part to a PCB, perform a pull test with 1KG of force in any direction for 5 to 10 seconds.

8.5 THERMAL SHOCK

8.5.1 -25°C for 15 minutes, 125°C for 15 minutes, 5 cycles.

8.6 HUMIDITY

8.6.1 96 hours at 40°C±2°C at 90-95% RH per MIL-STD-202F, method 103B, test B.

9 NOTES

9.1 Remove pin 3.
9.2 See below for solder content information of lead free solders.
9.3 This component and all homogeneous sub-components are RoHS compliant.

Solder Contents Information

S/No	Item / Chemicals	Content (%)
1	Sn	Balance
2	Ag	3.0-4.0
3	Cu	0.5-1.0
4	Pb	8 Less than 0.1
5	Sb	Less than 0.25
6	Zn	Less than 0.002
7	Fe	Less than 0.02
8	As	Less than 0.03
9	Ni	Less than 0.01
10	Bi	Less than 0.1
11	Cd	Less than 0.002
12	Al	Less than 0.002