

DATE : SEPT, 10 2013.

TO: ELECTRONICS SOURCE CO.,LTD.

SPECIFICATION

CUSTOMER NO. : MPI1919-EI19Z11
 MPI-NEO. NO. : MPI1919-EI19Z11
 SPECIFICATION NO. : DW-EN-173

RECEIVED SIGNATURE

MANAGER	ASST MGR	IN CHARGED BY

*When changing the contents in this specification, we will submit the quality/reliability check data before hand and inform CUSTOMER of them in writing.

*This specification consists of 9 pages including the front cover, appendixes.

PRESENTED : MPI-NEO CO.,LTD
 DEPARTMENT : ENGINEERING SECTION
 COUNTRY OF ORIGIN THAILAND

MANAGER	ASST MGR	IN CHARGED BY
MR.MUKAI N.	MS.SUNEE R.	MR.KHACHORNSAK K.

Do not put one's seal / signature on RECEIVED SIGNATURE. Do not add/revise/delete words.
 This product comply with RoHS regulation

MANUFACTURING / HEAD OFFICE

MPI-NEO CO.,LTD.

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 SAMUTSAKORN 74000 THAILAND

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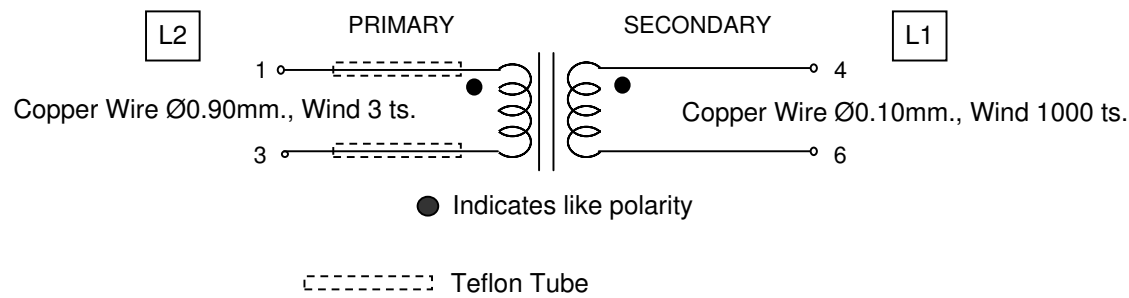
Customer Name : E-SOURCE	MPI PART NO. : MPI1919-EI19Z11
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REVISION RECORD			
Date	Rev. No.	Description	Changed Reason
SEPT, 10 2013.	00	NEW	

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SCHEMATIC DIAGRAM :

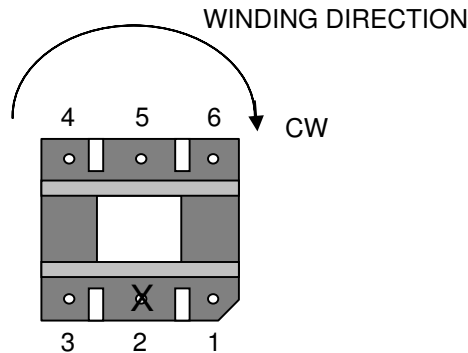


WINDING SPECIFICATION : (Winding Direction (Bottom View) : C.W)

NO.	NAME	TERMINAL	WIRE	TURN	METHOD	INSULATION TAPE	TURN
1	L1	4 - 6	Ø 0.10mm. 2UEW 130℃	1000	Uniform	0.025mm.TH.x 8.5W Yellow	3
2	L2	1 - 3	Ø 0.90mm. 2UEW 130℃	3	Uniform	Teflon Tube	

Core Fixing Tape : Polyester Film Tape 0.025mm.TH.X 6W (Yellow) 2 Turns

BOBBIN BOTTOM VIEW

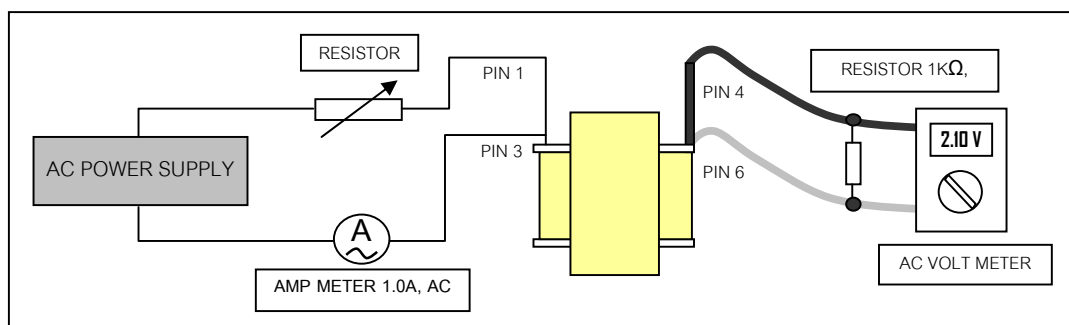


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ELECTRICAL SPECIFICATION :

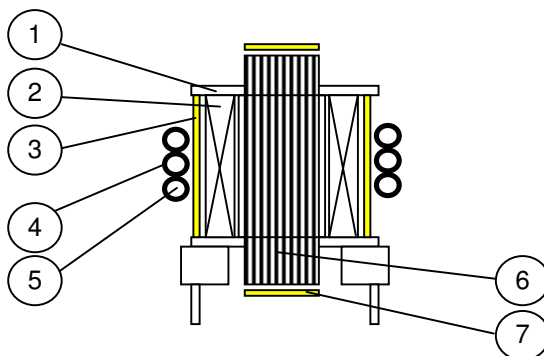
Item	Description	Level	Pin	Specification	Instrument
Inductance Test	NONE				
DC Resistance	At Temp. 26°C		1 - 3 4 - 6	4.88 mΩ REF. 68.74 Ω REF.	DCR Meter
Turns Ratio	NONE				
Insulation Resistance	NONE				
HI-POT	AC 50/60 Hz.	1 mA.	1-3 to 4-6 Coil - Core	AC 1,500 V For 1 Second	HI-POT Tester
Voltage Test	Input Current AC 1.0A Pin 1 - 3		4 - 6	Output Voltage 2.10 V ±10% with R 1k	

TEST CIRCUIT :



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CONSTRUCTION DETAILS :



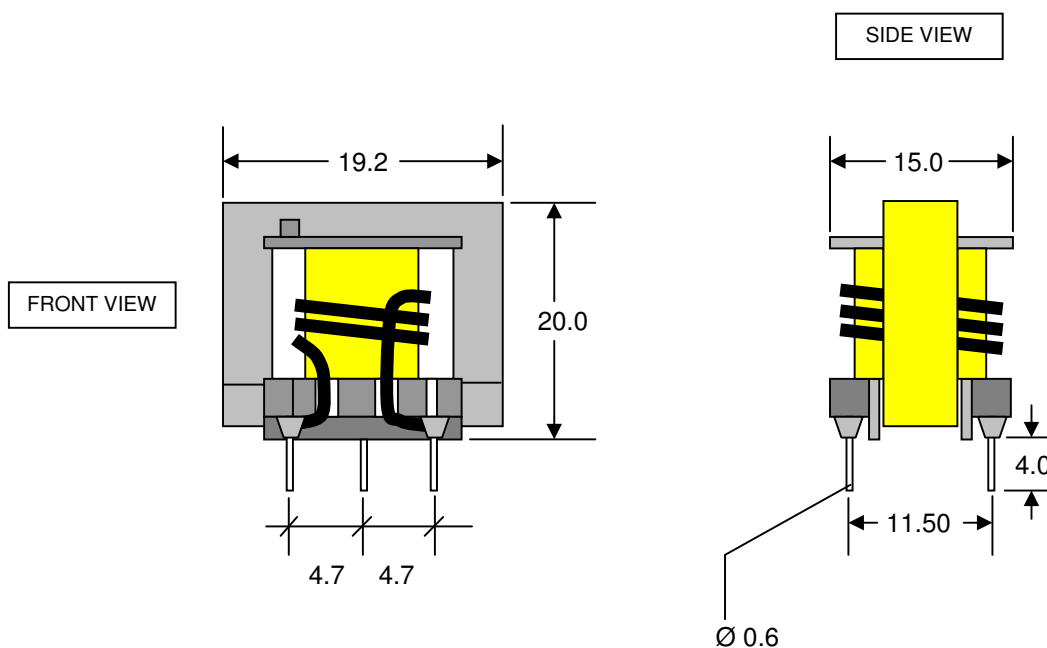
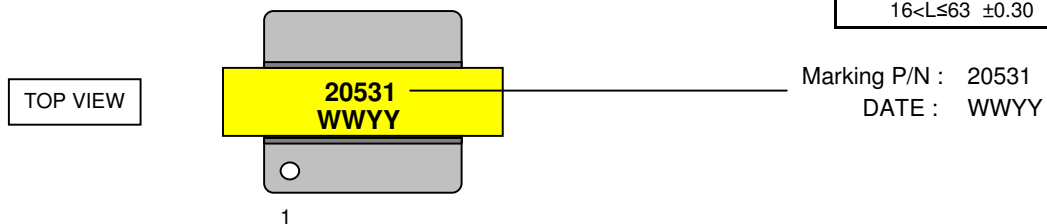
No.	Part Name	Description	Manufacturer	UL No.
1	Bobbin EI-19, 6 Pins	Phenolic 94V-0 T375J PM-9630, PM9820	Chang Chun Plastics Sumitomo Bakelite	E59481 E41429
2	Copper Wire (L1)	Polyurethane enamelled copper wire Ø 0.10mm. 2UEW, 130°C	Siam Pacific Optional	E142108
3	Wrapping Tape	Insulation Tape 0.025mm.TH. #25, Wrap 3 Turns. #631S #25 (120°C) #1350F-1 (130°C) #31C (130°C) 1P802 (130°C)	Teraoka 3M NITTO P-LEO Optional	E56086 E17385 E34833 E126174
4	Insulation Tubing	PTFE Tube 0.15mm.TH.	LEOFLON Optional	E156256
5	Copper Wire (L2)	Polyurethane enamelled copper wire Ø 0.90mm. 2UEW, 130°C	Siam Pacific Optional	E142108
6	Lamination Core	EI-19, Z11 0.35mm.TH.	Optional	
7	Core Tape	Same as item 3		
8	Varnish	TVB-2180T	Kyocera Chemical Corp. Optional	E83702
9	Solder	Lead free Solder M705	Senju Metai Industry Co.,Ltd. Optional	
10	Marking Ink	IR-270BK	Domino Printing Optional	

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OUTLINE DWG. :

DO NOT SCALE.

UNIT IN mm.
TOLERANCES
0<L≤4 ±0.10
4<L≤16 ±0.20
16<L≤63 ±0.30



NOTE :

1. Bobbin should not have burry on the surface so not to effect damage to wires.
2. The product including wire should not be damaged during the work of core assembly and on line.

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Packing 梱包

The packing shall be packed by MPI-NEO specified material and method.

It has no absorbing humidity and broken components.

Shall be marked the items on external surface as follow

弊社所定の梱包箱、梱包方法で行い、破損、吸湿等の無い様にする。

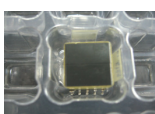
梱包箱には次の項目を表示する。

- | | |
|----------------|-------|
| 1 Part number | 品番 |
| 2 Lot number | ロット番号 |
| 3 Quantity | 数量 |
| 4 Manufacturer | 製造者名 |

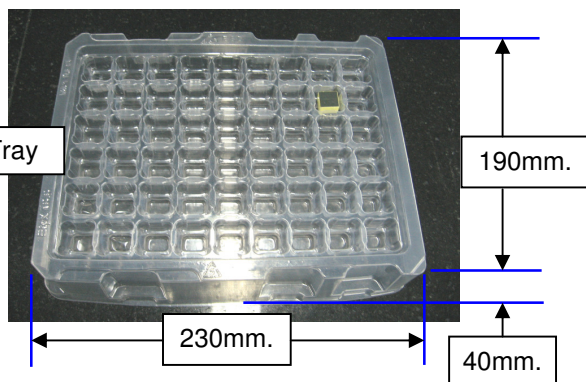
Packing specification 梱包仕様



1 Tray = 54pcs.



Plastic Tray



LABEL

MPI-NEO		TRANSFORMER	
Customer Code No.	XXX	①	7.5cm
MPI Code No.	XXX	②	
Lot No. : DD.MMM.YYYY		③	
PO No. XXXXXXXX		④	
Q'ty. XXX		⑤	
Carton No. XX		⑥	
Ship Date DD.MMM.YYYY		⑦	
MPI-NEO CO., LTD.		RoHS	
8.0cm			

- ① 客先製品名
- ② MP I 製品名
- ③ 製造年月日
- ④ 注文书番号
- ⑤ 数量
- ⑥ 梱包箱番号
- ⑦ 出荷年月日

Customer Parts Name

MPI Parts Name

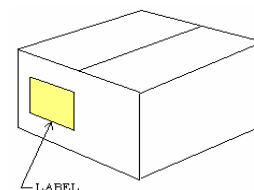
Production Date

P/O No.

Quantity

Carton No.

Shipment Date



Dimension C.T. (mm.) 寸法	One C.T. total q'ty (pcs.) 入数/箱	Weight/pc. (g) 製品重量/個	Total weight/C.T. (kg.) 総重量/箱
W: 254 *D:400 *H:212	648	6.50	5.50

FOR REF. ONLY.

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PROCESS FLOW CHART :

MPI-NEO QUALITY CONTROL PROCESS CHART OF TRANSFORMER

Process flow	Process Name	Machine	Control Item	Standard	Interval	Responsibility	Remarks
1	Receiving	Visual	- Correct part - Document check - Package condition	-storage procedure	100%	store	
2	Incoming QC	Micro meter Digital caliper Digital multi meter	part dimension part code Part specification	Sampling MIL-105E AQL = 0.65 Level S-3 - Incoming inspection	Sampling	Q.C.	Incoming inspection sheet
3	Stock		Storage and segregate by Item code, check label and quantity at boxes	-storage procedure -storage work Instruction			Warehouse check sheet Stock card
4	Winding wire	Visual	Turn, Terminal position window position, winding method PRI, SEC	Work instruction	4 times / day	chief line	In process Open check Machine check sheet Daily Lot Control
5	Winding tape	Visual	Tape turn	Work instruction	100%	operator	
6	Connecting Pin	Visual	Pin position, Window position Window position , Wiring Height	Work instruction	100%	operator	
7	Dip Solder	Thermometer Visual	Control temperature Solder level , Dipping time	WI-QC-SOLDER DIP-01	2 times / day 100%	Chief line operator	Temperature record
8	Cleaning		Solder dust , solder joint Soldering condition, Bobbin condition	Work instruction	100%	operator	Lot Control
9	Stack	Visual	Lamination size	Work instruction	100%	operator	Machine check sheet Daily
10	Electrical test I	Multimeter	Voltage Test	Work instruction	100%	operator	Machine check sheet Daily Electrical test check sheet
11	Electrical test II	Hi-pot tester	Coil - Coil Coil - Core	Work instruction	100%	operator	Electrical test check sheet Machine check sheet Daily
12	Core tape	Winding tape Machine	Tape turn	Work instruction	100%	operator	
13	Baking	Oven Machine	Baking time Varnish Density	WI-QC-009	100%	operator, QC	Drying Record Machine check sheet Daily
14	Marking	Marking Machine	Customer model, Rev. Date code.	Work instruction	100%	operator	
15	Electrical test III	Hi-pot tester	Coil - Coil Coil - Core	Work instruction	100%	operator	Electrical test check sheet
16	Out going Inspection	Visual Dimension jig	confirm side(pin , outside dimension) out side ,(pin bent , solder ,tape ,etc.)	Work instruction	100%	operator	Lot Control
17	Packing	Visual	Part Name , Part No. , Lot No.,	Work Instruction for packing	100%	operator	Lot Control Packing report
18	Final Inspection	Visual Hi-pot , Multimeter Digital caliper	Electrical test Outgoing Test Open check	MIL 105E AQL= 0 Level GII MIL 105E AQL= 0.65 Level GII	sampling	Q.C.	Final Inspection sheet
19	Shipping		label, Model No., Lot NO. Q'ty , weight	Identification procedure	100%	operator	Commercial Invoice