



QS9000 & ISO14001 & TS16949 CHILISIN ELECTRONICS CORP.

Lead-Free & RoHs Compliance!!

SPECIFICATION FOR APPROVAL

CUSTOMER : 國益商絡

CUSTOMER P/N : _____

OUR DWG No : TE1-610234

QUANTITY : x Pcs. DATE : 2016/1/19

ITEM : SL1010T-470K-N

SPECIFICATION ACCEPTED BY:	
COMPONENT ENGINEER	
ELECTRICAL ENGINEER	
MECHANICAL ENGINEER	
APPROVED	
REJECTED	

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DRAWN BY	Jiusheng	CHECKED BY	Liukan	APPROVED BY	Tangshan	QRA BY	
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SPECIFICATION FOR APPROVAL

CUSTOMER			國益商絡		CLS DWG. NO.	Rev
					TE1-610234	A
CUSTOMER'S PART NO/DWG NO.		DESCRIPTION			DATE	
		SL1010T-470K-N			2016/1/19	
(1) MECHANICAL ASSEMBLY					A	13.5max m/m
					B	3.5±0.5 m/m
					C	5.0±0.5 m/m
					D	12.0max m/m
					E	0.8±0.1 m/m
					F	m/m
					G	m/m
					H	m/m
					I	m/m
					J	m/m
					(2) ELECTRICAL REQUIREMENTS	
L	47.0±10%	uH	TEST FREQUENCY	1KHZ	0.25V	
RDC	75.0max	mΩ	TEST FREQUENCY			
IDC	2.3max	A	TEST FREQUENCY	1KHZ	0.25V	
I _{rms}	2.1max	A	TEST FREQUENCY		ΔT ≤ 40°C	
SRF	5.0min	MHZ	TEST FREQUENCY			
RATED CURRENT						
(4) TEST INSTRUMENTS						
*16502 (RDC) *HP4284A+42841A (L, IDC, I _{rms}) *HP4285A (SRF)						
*Storage Temperature: Under 25 °C , Humidity < 75% RH (6 Month) * Operating temperature -25°C to +85°C						
NOTE: *套管需捺印“470K”白色字样,量產時改善 * The casing need to be stamped with the words "470K" in white, to improve in the process of mass production *IDC:L drop 10%max *產品使用時電流不得超過規格為準 The current shall not exceed the specified one when using this part.					APPROVED BY	
					CHECKED BY	
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					Jiusheng	



TEST DATA FOR PREPRODUCTION SAMPLES

CUSTOMER						CLS DWG. NO.	Rev
國益商絡						TE1-610234	A
CUSTOMER'S PART NO./DWG.NO				DESCRIPTION		DATE	
				SL1010T-470K-N		2016/1/19	
						QUANTITY	PCS.
MEAS. ITEM		L uH	RDC mΩ	IDC A	I _{rms} A	SRF MHZ	
SPEC	CUSTOMER						
	SUGGEST	47.0±10%	75.0max	2.3max	2.1max	5.0min	
TEST FREQ.		1KHZ 0.25V		1KHZ 0.25V	ΔT ≤ 40°C		
1		47.40	63.35	OK	OK	8.10	
2		47.51	63.80	OK	OK	8.40	
3		47.98	64.30	OK	OK	8.30	
4		47.75	63.80	OK	OK	8.30	
5		47.54	64.38	OK	OK	8.50	
6		47.57	63.60	OK	OK	8.60	
7		48.24	63.95	OK	OK	8.30	
8		47.95	64.03	OK	OK	8.30	
9		47.70	64.69	OK	OK	8.30	
10		47.74	63.82	OK	OK	8.50	
11							
12							
13							
14							
15							
\bar{X}		47.74	63.97			8.36	
R		0.84	1.34			0.50	
CUSTOMER SAMPLE							
TEST CONDITION: TEMP. 25 °C R.H. 65%						APPROVED BY	
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						DRAWN BY	
						Jiusheng	



TEST DATA FOR PREPRODUCTION SAMPLES

CUSTOMER						CLS DWG. NO.	Rev
國益商絡						TE1-610234	A
CUSTOMER'S PART NO./DWG.NO				DESCRIPTION		DATE	
				SL1010T-470K-N		2016/1/19	
						QUANTITY	PCS.
MEAS. ITEM		A m/m	B m/m	C m/m	D m/m	E m/m	
SPEC	CUSTOMER						
	SUGGEST	13.5max	3.5±0.5	5.0±0.5	12.0max	0.8±0.1	
TEST							
FREQ.							
1		12.01	3.35	4.90	10.62	0.76	
2		11.92	3.46	4.92	10.65	0.75	
3		11.95	3.56	5.00	10.65	0.77	
4		12.03	3.80	4.77	10.68	0.76	
5		11.89	3.37	4.95	10.63	0.78	
6		11.93	3.40	4.90	10.64	0.78	
7		12.04	3.83	4.95	10.68	0.75	
8		12.15	3.63	4.99	10.60	0.76	
9		11.92	3.28	4.97	10.62	0.77	
10		11.89	3.45	4.95	10.66	0.78	
11							
12							
13							
14							
15							
\bar{X}		11.97	3.51	4.93	10.64	0.77	
R		0.26	0.55	0.23	0.08	0.03	
CUSTOMER SAMPLE							
TEST CONDITION: TEMP. 25 °C R.H. 65%						APPROVED BY	
						CHECKED BY	
						DRAWN BY	
						Jiusheng	



5. MATERIAL LIST :

ITEM	PART	DESCRIPTION	TEMP	SUPPLIERS	UL NO.
1	WIRE	2SFBW	180°C	JUNG SHING OR EQUIV	E174837
2	CORE	Ferrite		CHENZHOU OR EQUIV	
3	PIN	CP wire		MINGTONG OR EQUIV	
4	Solder	Sn99.9		QIANDAO OR EQUIV	
5	EPOXY	FK661-S		FUHUI OR EQUIV	
6	TUBE	Black UL		XINGQI OR EQUIV	

DRAWN BY	CHECKED BY	APPROVED BY	CUSTOMER : 國益商絡	DATE	2016/1/19
Jiusheng			PART NO :	REV	A
			ISSUE NO : SL1010T-470K-N	RACE	



1-1 Mechanical Performance

No	Item	Specification	Test Method
1-1-1	Vibration	Appearance: No damage L change: within±10%	Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1min Amplitude: 1.5mm Time: 2hrs for each axis (X, Y & Z), total 6hrs

1-2 Environmental Performance

No	Item	Specification	Test Method															
1-2-1	Temperature Cycle	Appearance: No damage L change: within±10%	One cycle: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Time (min)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25±3</td> <td>30</td> </tr> <tr> <td>2</td> <td>25±2</td> <td>3</td> </tr> <tr> <td>3</td> <td>85±3</td> <td>30</td> </tr> <tr> <td>4</td> <td>25±2</td> <td>3</td> </tr> </tbody> </table> Total: 100cycles Measured after exposure in the room condition for 24hrs	Step	Temperature (°C)	Time (min)	1	-25±3	30	2	25±2	3	3	85±3	30	4	25±2	3
Step	Temperature (°C)	Time (min)																
1	-25±3	30																
2	25±2	3																
3	85±3	30																
4	25±2	3																
1-2-2	Humidity Resistance		Temperature: 40±2°C Relative Humidity: 90 ~ 95% Time: 1000hrs Measured after exposure in the room condition for 24hrs															
1-2-3	Heat Life		Temperature: 85±3°C Relative Humidity: 0% Applied Current: Rated Current Time: 1000hrs Measured after exposure in the room condition for 24hrs															
1-2-4	Cold Resistance		Temperature: -25±3°C Relative Humidity: 0% Time: 1000hrs Measured after exposure in the room condition for 24hrs															

WIRE



OBMW2
Magnet Wire - Component

September 8, 2000

JUNG SHING WIRE CO LTD
231 CHUNG CHENG RD, SEC 3 JEN-TEH HSIANG, TAINAN
HSIEN TAIWAN

E174837

Mtl Dsg	Mark Dsg	Coat Typ		ANSI Type	Temp Class
		BC	OC		
AIW	—	Polyamideimide	—	MW81-C	220
CFUEWB	—	Polyurethane	—	MW75C	130
EIAIW	—	Polyesterimide	Polyamideimide	MW35C	200
EILOCKY	—	Polyesterimide	Polyamide	—	180
EILOCKW	—	Polyesterimide	Modified Epoxy	—	200
EIW	—	Polyesterimide	—	—	220
EIW-2	—	Polyesterimide	—	MW74-C	200
FL.EILOCKY	—	Modified Polyester	Polyamide	—	155
LSFFW	—	Polyurethane	—	MW79-C	155
LSUEW	—	Polyurethane	—	—	130
PEW	—	Polyester	—	—	155
PEY	—	Polyester	Nylon	MW24-C	155
SF.FLW	—	Modified Polyester	—	MW26C	155
SF.EIW	—	Polyesterimide	—	MW77C	180
SF.BY@	—	Modified Polyester	Nylon	MW27-C	155
SF.FLY@	—	Modified Polyester	Nylon	MW27-C	155
SF.BLOCKBS	—	Modified Polyester	Modified Polyamide	—	155
SF.EILOCKY#	—	Polyesterimide	Polyamide	—	180
SF.EILOCKBS	—	Polyesterimide	Modified Polyamide	—	180
SF.BW@	—	Modified Polyester	—	MW26C	155
SFFW	—	Polyurethane	—	MW79	155

287806002

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committed to quality service

Mtl Dsg	Mark Dsg	Coat Typ		ANSI Type	Temp Class
		BC	OC		
SFFY	—	Polyurethane	Polyamide	MW80C	155
UEW-1	—	Polyurethane	—	MW2-C	105
UEW-2	—	Polyurethane	—	—	130
UEW-4	—	Polyurethane	—	MW75C	130
UEY	—	Polyurethane	Nylon	MW28-C	130
UEY-2	—	Polyurethane	Polyamide	MW28-C	130

@ - May be suffixed by LZ; # - May be suffixed by LZ, EL or LZL.
LZ - Signifies magnet wires twisted together; EL - signifies base coated magnet wire laid parallel with top coat applied overall; LZL - signifies base coated magnet wire twisted together and covered with top coat overall.

Marking: Company name or trademarks or 榮星電線, material designation or marked designation on packaged or reel, and Recognized Component Mark.

See General Information Preceding These Recognitions
For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

287806002

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OBMW2/E174837
September 8, 2000