

Printed circuit boards of Microcirtec:
Of course UL-certified !

What means UL?

The letters UL stand for Underwriters Laboratories Inc., this organization is an independent, not-for-profit product-safety testing and certification organization.

In the beginnings of UL more than 100 years ago stood questions in the range of fire-protection-mechanisms in the foreground. Today all possible products, materials, constructions and systems are tested and evaluated regarding their electrical danger as well as their danger of accident and fire. And in addition there were examined alarm systems and the ability to discover, control and prevent fire.

UL develops safety regulations, which are taken over frequently as ANSI standards. Underwriters Laboratories certify and register customers according to ISO 9000.

What means this indication for the Microcirtec GmbH and their customers?

Products with this indication have international a higher acceptance. Many customers wish or demand a UL marking. The marking offers easements in questions of the product liability and brings a higher acknowledgment at authorities. In order to guarantee the adherence to the examined values, a Follow UP service is furnished. An expert from UL visits regularly our manufacturing areas and controls ranges of our production. In addition we are obligated to submit in certain distances printed circuit boards in the listed remarks to UL for examination. This offers additional security and reliability.

You increase your export chances in the USA and Canada, if the printed circuit boards of your products are UL marked. UL stands for "Underwriter Laboratories" Inc., a "non-profit organization", which examines electronic devices and components for the adherence to American safety standards.

Also our printed circuit boards were subjected to the hardest tests in the UL laboratories and they existed even the extremely heavy 130 C° long term test. That qualifies us without reservation for the US-American and Canadian safety standards. Down you see our "Yellow Card" shown with the valid parameters for a UL marking.

ZPMV2/ZPMV8. (CANADA)										APRIL 5, 2000/DEC. 09,2009					
E 96892															
Wiring, Printed – Component/ Wiring Printed Certified for Canada - Component															
MICROCIRTEC GMBH															
OBERDIESSEMER STRASSE 14, 47805 KREFELD FED REP GERMANY															
Clad Cond Width				SS		Max Area				Max Oper Temp		UL94 Flame	Meets UL796	CTI	
Min	Min Edge			Thk	DS	Diam		Sold Lts		C	Sec	C	Class	DSR	PLC
Type	μ	In.	μ	In.	μ	Mil	+	mm	In.	C	Sec	C	Class	DSR	PLC
Single layer printed wiring board.															
Soco	300	0.013	500	0.020	8	0.32	DS	28.5	1.125	260	5	120	V-0	All	3
Soco1	150	0.006	250	0.010	17	0.65	DS	50.8	2.000	288	20	130	V-0	All	*
Multilayer printed wiring board.															
ML1+	150	0.006	250	0.010	17	0.65	DS	50.8	2.000	288	20	130	V-0	All	3
ML2+	150	0.006	250	0.010	17	0.65	DS	12,7	0,500	288	20	130	V-0	All	4
+ SS-Singel sided, DS-Double or single sided															
* -various CTI, may be marked on individual boards															
Marking:		Company name, "MIC" (MicroCirtec) or trademark (Precoplat) and type designation may be followed by suffix to denote factory identification or buring test classification.													
See General Information Preceeding These Recognitions															
A (black triangle) Symbol is marked on those products within a given type designation that comply with direct support of current-carrying parts performance level requirements of UL 796. "All" is used to indicate that all base materials under that type designation comply with direct support of current-carrying parts performance level requirements of UL 796															
For use only in equipment where the acceptability of the combination is determined by Underwriter Laboratories Inc.															

Explanations concerning the UL certification

Clad Cond Width Min

The minimum conductor width is 150 μm , except the distance of the track to the outer contour is smaller than 400 μm .

Clad Cond Width Min Edge

If the distance between the track and the outer contour is smaller than 400 μm , then the track must have a minimum width of 254 μm .

Thk

Minimum copper-thickness on the external layers is 17 μm

Max Area Diam

In no place of a copper surface may a circle with a diameter larger than 50,80 mm be insertable, without that the copper surface encloses it completely.

PLC

„Performance Level Category“ for “Comparative Tracking Index“ f.ex. (CTI). „3“ for CTI 175 - 250

For further Informations.



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