



UL Designation Chart - Simplified

Parameter	Designator				
	Multilayer MLB-3	MLB-4	MLB-5	Double Sided 2-0	Double Sided 3-0
Laminate/Pre-Preg	1755V / 1650V 1755 / 1650 1755 / FR-406++ KB-6160, 4, 7 / MEM 1650 KB-6168 / 1650V \$\$ / \$\$, \$\$\$ / \$\$\$ \$\$\$\$ / \$\$\$\$	Ventec % / Ventec %, 1755 / Ventec %%	RO4350B / ^ / ^ RO4350B / ^^ / ^^	MEM 1755, GFN-125, 140,150&170 Ventec VT41, 42 & 45, Taiwan Leader LS-4Y, <u>1/</u> Grace FR4-97, ILM "ILM-R1" <u>2/</u>	1755, 1755V, \$, \$\$, \$\$\$, Ventec VT41, 42 & 45, Taiwan Leader LS-4Y, <u>1/</u> KB-6160, 4, 7 & 8, Grace FR4-97, ILM "ILM-R1" <u>2/</u> Shanghai Nanya SN-L4 <u>3/</u>
Max Operating Temp	130	130	130	130	130
Thinnest Core	0.003"	0.003"	0.004" ptf / 0.003" FR-4	0.025"	0.020
Thinnest Pre Preg	0.002" (106 and thicker)	0.002" (106 and thicker)	0.002" (106 and thicker)	N/A	N/A
Thinnest Build Up	0.020" (w/out copper, material only)	0.020" (w/out copper, material only)	0.020" (w/out copper, material only)	N/A	N/A
Max Cu Foil Inner	3 oz	3 oz	3 oz	N/A	N/A
Max Cu Foil Outers	3 oz	3 oz	3 oz	6 oz	3 oz
Thinnest Line Width	0.002" mid-brd / 0.003" edge	0.002" mid-brd / 0.003" edge	0.002	0.004"	0.002" mid-brd / 0.003" edge
Largest Ground Plane	4.00"	0.5"	4.00"	4.00"	4.00"
Manufacturing Process	1ML, 2ML	1ML	2ML	1DS	1DS, 2DS
Solder Mask	PSR-4000BN,GG,HG,& MP, XV501T-4 [Curtain Coat (g)], XV501T [screen (g)]	PSR-4000BN,GG,HG,& MP, XV501T-4 [Curtain Coat (g)], XV501T [screen (g)]	PSR-4000BN,GG,HG,& MP, XV501T-4 [Curtain Coat (g)], XV501T [screen (g)]	PSR-4000BN,GG,HG,& MP, XV501T-4 [Curtain Coat (g)], XV501T -4 [screen (g)]	PSR-4000BN,GG,HG,& MP, XV501T-4 [Curtain Coat (g)], XV501T [screen (g)]
Hole Plug	SR-1000, PSR-4000BN, HG	No	SR-1000, PSR-4000BN, HG	No	SR-1000, PSR-4000BN, HG
Finishes	Bare Copper,HASL Nickel or Gold, Nickel Gold, Gold Tabs, Imm Tin, Imm Silver, OSP, Plated Through Holes	Same.	Same.	Same.	Same.

Double Sided Suffixes (Cores Only):

3-0 \$ IS-400, FR-254, FR-370HR, FR-370, HP-850, FR-250HR HP-870
 3-0 \$\$ FR-408, FR-408HR, IS415, IS811
 3-0 \$\$\$ VT-47, VT-47TC, VT-481, VT-481TC, VT-575, VT-585

1/ Taiwan Leader UL Part No. LS-4Y =FR4135, LF150, LF170
2/ ILM UL Part No. ILM-R1 =
3/ Shanghai Nanya UL Parat No. SN-L4 = NY1135,NY1140, NY1150, NY1170

Multi-Layer Suffixes:

\$\$ IS-400, FR-254, FR-370HR, FR-370, HP-850, FR-250HR HP-870 (Pre-Preg and/or Cores as applies)
 \$\$\$ FR-408, FR-408HR, IS415, IS811 (Pre-Preg and/or Cores as applies)
 \$\$\$\$ VT-47, VT-47TC, VT-481, VT-481TC, VT-575, VT-585 (Pre-Preg and/or Cores as applies)
 % GFN-125, GFP-125+, GFK-140, GFG-150, GFG-170 (Pre-Preg and/or Cores as applies)
 %% GFN-125, GFP-125+, GFK-140, GFG-150, GFG-170 (Pre-Preg only as applies)
 ^ IS-400, FR-254, FR-370HR, FR-370, HP-850, FR-250, HR HP-870 (Pre-Preg and/or Cores as applies)
 ^^ 1755V / 1650V