Polymeric Materials - Filament-wound Tubing, Industrial Laminates, Vulcanized Fiber, and Materials for Use in Fabricating Recognized Printed Wiring Boards Certified for Canada - Component

COMPANY
KINGBOARD LAMINATES HOLDINGS LTD
23/F., Delta House
No. 3 On Yiu Street
Shatin, Hong Kong

E123995

Industrial laminates:

Mtl Dsg	ANSI Type	Color	Build up Min Thk (mm)	Flame Class	R.T.I. Elec (°C)	R.T.I. Mech (°C)	H WI	H AI	H VTR	H CTI	Meets 746E Non-HAL	Meets 746E DSR
Industrial laminates furnished as sheets												
KB-150	XPC	NC, BK	0.71	HB	130	130	2	0	0	-	-	Yes
			1.57	HB	130	130	1	0	1	4	-	Yes
KB-2150	FR-2	NC	1.45	V-0	105	105	4	3	1	4	-	Yes
KB-2150G	FR-2	TN	0.71	V-0	75	75	0	3	6	-	-	Yes
			1.45	V-0	105	105	0	3	6	3	-	Yes
KB-3151S (with Adhesive)												
	FR-1	NC	1.45	V-0	130	130	0	0	-	0	-	Yes
			0.71	V-0	130	130	0	0	-	-	-	Yes
KB-3151S (without Adhesive)												
	FR-1	NC	1.45	V-0	130	130	3	3	4	4	-	Yes
			0.71	V-0	130	130	3	3	4	-	-	Yes
KB-3152	FR-1	NC	0.71	V-0	130	130	0	0	-	-	-	Yes
			1.45	V-0	130	130	0	0	-	0	-	Yes
KB-5150	CEM-1	NC	0.63	V-0	130	140	3	2	4	-	-	Yes
			1.40	V-0	130	140	1	2	4	3	-	Yes
KB-5150&	CEM-1	NC	0.63	V-0	130	140	1	3	4	-	-	Yes
			1.40	V-0	130	140	1	3	4	0	-	Yes
KB-5150HC	CEM-1	NC	0.63	V-0	130	140	3	2	-	-	-	Yes
			1.40	V-0	130	140	1	2	-	0	-	Yes
KB-5252	CEM-1	NC	0.63	V-0	130	140	3	2	-	-	-	Yes

			1.40	V-0	130	140	1	2	-	3	-	Yes
KB-6160A	FR-4.0	YL	0.38	V-0	130	130	0	0	-	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	3	-	Yes
KB-6160C	FR-4.0	NC	0.38	V-0	130	130	0	0	-	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	0	-	Yes
KB-6160LC(C)	FR-4.0	NC	0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	0	-	Yes
KB-6165	FR-4.0	YL	0.38	V-0	130	130	2	0	-	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	3	-	Yes
KB-6165C	FR-4.0	NC	0.05	-	-	-	-	-	-	-	-	-
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	0	-	Yes
KB-6165G	FR-4.1	NC	0.05	V-0	120	100	0	3	-	-	Yes	Yes
			0.38	V-0	130	130	0	1	-	-	-	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	3	-	Yes
KB-6165GC	FR-4.1	NC	0.05	V-0	120	100	0	3	-	-	Yes	Yes
			0.38	V-0	130	130	0	1	-	-	-	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	0	-	Yes
KB-6165LE	FR-4.0	NC	0.38	V-0	130	130	0	1	-	-	-	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	3	-	Yes
KB-6168	FR-4.0	NC	0.38	V-0	130	130	0	3	-	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	3	-	Yes
KB-6169GT	FR-15.1	NC	0.38	V-0	140	140	0	1	-	-	Yes	Yes
			0.63	V-0	150	150	0	1	-	-	-	Yes
			1.40	V-0	150	150	0	1	-	0	-	Yes
KB-7150	CEM-3.0	NC	0.63	V-0	130	140	0	2	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	3	-	Yes
KB-7150C	CEM-3.0	NC	0.63	V-0	130	140	0	2	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	0	-	Yes
Industrial laminates furnished as sheets or rolls												
FL-170	FR-4.0	NC	0.38	V-0	130	130	1	1	-	-	-	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	3	-	Yes

KB-5150A	CEM-1	NC	0.63	V-0	130	140	3	2	4	-	-	Yes
			1.40	V-0	130	140	1	2	4	2	-	Yes
KB-5150G	CEM-1	NC	0.63	V-0	130	140	3	2	4	-	-	Yes
			1.40	V-0	130	140	1	2	4	0	-	Yes
KB-5150H	CEM-1	NC	0.63	V-0	130	140	3	2	4	-	-	Yes
			1.40	V-0	130	140	1	2	4	2	-	Yes
KB-5150L	CEM-1	NC	0.63	V-0	130	140	3	2	4	-	-	Yes
			1.40	V-0	130	140	1	2	4	3	-	Yes
KB-616(X)	FR-4.0	YL	0.38	V-0	130	130	3	3	-	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	3	-	Yes
KB-6164F	FR-4.0	NC	0.38	V-0	130	130	0	4	-	-	-	-
			0.63	V-0	130	140	0	2	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	3	-	Yes
KB-6165F	FR-4.0	NC(YL)	0.38	V-0	130	130	3	3	-	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	3	-	Yes
KB-6167A	FR-4.0	NC	0.38	V-0	130	130	0	2	-	-	-	Yes
			0.63	V-0	130	140	0	2	4	-	-	Yes
			1.40	V-0	130	140	0	1	4	4	-	Yes
KB-6167F	FR-4.0	NC	0.38	V-0	130	130	0	3	-	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	3	-	Yes
KB-6167G	FR-4.1	NC	0.05	V-0	120	100	0	3	-	-	Yes	Yes
			0.38	V-0	130	130	0	1	-	-	-	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	0	-	Yes
KB-6167GMD	FR-4.1	NC	0.38	V-0	130	130	0	1	-	-	Yes	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	0	-	Yes
KB-6168LE	FR-4.0	NC	0.38	V-0	130	130	1	1	-	-	-	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	3	-	Yes
KB-6200G	FR-4.1	NC	0.05	V-0	120	100	0	3	-	-	Yes	Yes
			0.38	V-0	130	130	0	1	-	-	-	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	2	-	Yes
KB-7150T	CEM-3.0	NC	0.63	V-0	130	140	0	2	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	0	-	Yes
PI-515G	FR-4.1	NC	0.05	V-0	120	100	0	3	-	-	Yes	Yes

			0.38	V-0	130	130	0	1	-	-	-	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	3	-	Yes
Industrial laminates furnished as sheets, rods or tubes												
HF-140	FR-4.1	NC	0.38	V-0	130	130	0	2	-	-	Yes	Yes
			0.63	V-0	130	140	0	2	-	-	-	Yes
			1.40	V-0	130	140	0	2	-	3	-	Yes
HF-170	FR-4.1	NC	0.38	V-0	130	130	0	3	-	-	Yes	Yes
			0.63	V-0	130	140	0	3	-	-	-	Yes
			1.40	V-0	130	140	0	2	-	3	-	Yes
KB-3150N	FR-1	NC	0.71	V-0	130	130	0	0	-	-	-	Yes
			1.45	V-0	130	130	-	-	-	3	-	Yes
KB-3150NU %	FR-1	NC	0.71	V-0	130	130	3	3	4	-	-	Yes
			1.45	V-0	130	130	3	3	4	4	-	Yes
KB-3151HS	FR-1	NC	0.71	V-0	130	130	0	0	4	-	-	Yes
			1.45	V-0	130	130	0	0	4	0	-	Yes
*KB-3153**	FR-1	NC	0.71	V-0	130	130	0	0	4	-	-	Yes
			1.45	V-0	130	130	0	0	4	0	-	Yes
KB-5152	No ANSI	NC	0.60	V-0	-	-	-	-	-	-	-	-
			1.40	V-0	-	-	-	-	-	-	-	-
KB-6150	FR-4.0	NC	0.10	V-0	120	125	0	3	-	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	4	-	Yes
			0.38	V-0	130	130	0	3	-	-	-	Yes
KB-6162	No ANSI	NC	0.63	V-0	-	-	-	-	-	-	-	-
			1.40	V-0	-	-	-	-	-	-	-	-
KB-6167GLD	FR-4.1	NC	0.38	V-0	130	130	0	3	-	-	Yes	Yes
			0.63	V-0	130	140	0	3	-	-	-	Yes
			1.40	V-0	130	140	0	2	-	3	-	Yes
P-138	FR-4.0	YL	0.38	V-0	130	130	0	0	-	-	-	-
			0.64	V-0	130	140	0	0	-	-	-	-
			1.40	V-0	130	140	0	0	2	3	-	-
Industrial laminates												
EEL-128	FR-4.0	NC	0.38	V-0	130	130	3	0	-	-	-	-
			0.63	V-0	130	140	0	3	-	-	-	Yes
			1.40	V-0	130	140	0	2	-	3	-	Yes
EEL-145	FR-4.0	NC	0.38	V-0	130	130	3	0	-	-	-	-
			0.63	V-0	130	140	0	3	-	-	-	Yes
			1.40	V-0	130	140	0	2	-	3	-	Yes
KB-3151C (with Adhesive)												

	FR-1	NC	0.71	V-0	130	130	0	0	-	-	-	Yes
			1.45	V-0	130	130	-	-	-	0	-	Yes
KB-3151C (without Adhesive)												
	FR-1	NC	0.71	V-0	130	130	3	3	4	-	-	Yes
			1.45	V-0	130	130	3	3	4	4	-	Yes
KB-3151C175 (with Adhesive)												
	FR-1	NC	0.71	V-0	130	130	0	0	-	-	-	Yes
			1.45	V-0	130	130	-	-	-	3	-	Yes
KB-3200G	FR-4.1	NC	0.38	V-0	130	130	0	0	-	-	Yes	Yes
			0.63	V-0	130	140	0	0	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	3	-	Yes
KB-6155	FR-4.0	NC	0.38	V-0	130	130	0	3	-	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	4	-	Yes
KB-6165GMD	FR-4.1	NC	0.38	V-0	130	130	0	0	-	-	Yes	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	1	-	2	-	Yes
KB-7152	CEM-3.0	NC	0.63	V-0	130	140	0	2	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	3	-	Yes

Ultrathin build ups:

Build Up					Laminate			Prepreg		
Mtl Dsg	ANSI Type	Min Thk (mm)	TI Elec	TI Mech	Mtl Dsg	Thk (mic)	TI Elec	Mtl Dsg	Thk (mic)	TI Elec
EEL-128	FR-4.0	0.38	130	130	EEL-128	50	90	EP	50	90
EEL-145	FR-4.0	0.38	130	130	EEL-145	50	90	ETP	50	90
FL-170	FR-4.0	0.38	130	130	FL-170	50	90	PP-FL170	50	90
		0.45	130	130	FL-170	50	90	PP-FL170	50	90
		0.63	130	140	FL-170	50	90	PP-FL170	50	90
		1.40	130	140	FL-170	50	90	PP-FL170	50	90
HF-140	FR-4.1	0.38	130	130	HF-140	50	90	PP-HF140	50	90
HF-170/PP-HF170	FR-4.1	0.38	130	130	HF-170	65	90	PP-HF170	50	90
KB-3200G	FR-4.1	0.38	130	130	KB-3200G	65	90	PP-KB-3200G	50	90
KB-6155	FR-4.0	0.38	130	130	KB-6155	50	90	KB-6055	50	90
KB-616(X)	FR-4.0	0.38	130	130	KB-6160, KB-6164	100	120	KB-6060, KB-6064	50	90
KB-6160A	FR-4.0	0.38	130	130	KB-6160A	50	90	KB-6060A	50	90
KB-6160C	FR-4.0	0.38	130	130	KB-6160C	50	90	KB-6060C	50	90
KB-6164F	FR-4.0	0.38	130	130	KB-6164F	50	90	KB-6064F	50	90
KB-6165	FR-4.0	0.38	130	130	KB-6165	50	90	KB-6065	50	90
KB-6165C	FR-4.0	0.63	130	130	KB-6165C	50	90	KB-6065C	50	90
KB-6165F	FR-4.0	0.38	130	130	KB-6165F	50	90	KB-6065F	50	90

KB-6165G	FR-4.1	0.38	130	130	KB-6165G	50	90	KB-6065G	50	90
		0.63	130	140	KB-6165G	50	90	KB-6065G	50	90
KB-6165GC	FR-4.1	0.38	130	130	KB-6165GC	50	90	KB-6065GC	50	90
		0.63	130	140	KB-6165GC	50	90	KB-6065GC	50	90
KB-6165GMD	FR-4.1	0.38	130	130	KB-6165GMD	65	90	KB-6065GMD	50	90
KB-6165LE	FR-4.0	0.38	130	130	KB-6165LE	50	90	KB-6065LE	50	90
		0.45	130	130	KB-6165LE	50	90	KB-6065LE	50	90
		0.63	130	140	KB-6165LE	50	90	KB-6065LE	50	90
		1.40	130	140	KB-6165LE	50	90	KB-6065LE	50	90
KB-6167A	FR-4.0	0.38	130	130	KB-6167A	100	120	KB-6067A	50	90
KB-6167F	FR-4.0	0.38	130	130	KB-6167F	100	90	KB-6067F	50	90
KB-6167G	FR-4.1	0.38	130	130	KB-6167G	50	90	KB-6067G	50	90
KB-6167GLD	FR-4.1	0.38	130	130	KB-6167GLD	65	90	KB-6067GLD	50	90
KB-6167GMD	FR-4.1	0.38	130	130	KB-6167GMD	65	90	KB-6067GMD	50	90
KB-6168	FR-4.0	0.38	130	130	KB-6168	50	90	KB-6068	50	90
KB-6168LE	FR-4.0	0.38	130	130	KB-6168LE	50	90	KB-6068LE	50	90
		0.45	130	130	KB-6168LE	50	90	KB-6068LE	50	90
		0.63	130	140	KB-6168LE	50	90	KB-6068LE	50	90
		1.40	130	140	KB-6168LE	50	90	KB-6068LE	50	90
KB-6169GT	FR-15.1	0.38	140	140	KB-6169GT	50	90	KB-6069GT	50	90
		0.63	150	150	KB-6169GT	50	90	KB-6069GT	50	90
KB-6200G	FR-4.1	0.38	130	130	KB-6200G	50	90	PP-KB6200G	50	90
P-138	FR-4.0	0.38	130	130	P-138	100	120	PP-138	50	90
PI-515G	FR-4.1	0.38	130	130	PI-515G	50	90	PP-PI515G	50	90

Metal clad industrial laminates:

				Bld up	Clad Cond Thk			Max		Max	Assembly Solder		Solder Lts	
Metal Clad Dsg	Lam-inate Dsg	Pre-preg Dsg	ANSI Type	Min Thk (mm)	Min Ext (mic)	Max Ext (mic)	Max Int (mic)	Area Dia (mm)	Flame Class	Oper Temp (°C)	Process Temp(°C)	Process Cycles	Temp (°C)	Time (sec)
Metal clad industrial laminates for use in multilayer printed wiring boards with copper on one or both sides, furnished as sheets														
FL-170	FL-170	PP-FL170	FR-4.0	0.38	9	102	68	50.8	V-0	130	-	-	288	30
				0.45	9	102	102	50.8	V-0	130	-	-	288	30
KB-6160A	KB-6160A	KB-6060A	FR-4.0	0.38	12	102	70	50.8	V-0	130	-	-	288	20
KB-6160C	KB-6160C	KB-6060C	FR-4.0	0.38	12	102	60	50.8	V-0	130	-	-	288	20
KB-6164F	KB-6164F	KB-6064F	FR-4.0	0.38	12	102	102	50.8	V-0	130	-	-	288	60
KB-6165	KB-6165	KB-6065	FR-4.0	0.38	12	102	54	50.8	V-0	130	-	-	288	60

KB-6165C (ASP 1)														
	KB-6165C	KB-6065C	FR-4.0	0.63	12	102	102	50.8	V-0	130	260	4	288	60
KB-6165F	KB-6165F	KB-6065F	FR-4.0	0.38	12	102	102	50.8	V-0	130	-	-	288	60
				0.63	12	102	204	50.8	V-0	130	-	-	288	60
KB-6165G	KB-6165G	KB-6065G	FR-4.1	0.38	12	102	102	50.8	V-0	130	-	-	288	20
KB-6165GC	KB-6165GC	KB-6065GC	FR-4.1	0.38	12	102	102	50.8	V-0	130	-	-	288	20
KB-6165LE	KB-6165LE	KB-6065LE	FR-4.0	0.38	9	102	68	50.8	V-0	130	-	-	288	30
				0.45	12	102	102	50.8	V-0	130	-	-	288	30
KB-6167F	KB-6167F	KB-6067F	FR-4.0	0.38	12	102	102	50.8	V-0	130	-	-	288	60
KB-6167G/KB-6067G														
	KB-6167G	KB-6067G	FR-4.1	0.38	12	102	102	50.8	V-0	130	-	-	288	20
KB-6168	KB-6168	KB-6068	FR-4.0	0.38	12	102	70	50.8	V-0	130	-	-	288	60
KB-6168LE	KB-6168LE	KB-6068LE	FR-4.0	0.38	9	102	68	50.8	V-0	130	-	-	288	30
				0.45	9	102	102	50.8	V-0	130	-	-	288	30
KB-6169GT	KB-6169GT	KB-6069GT	FR-15.1	0.38	12	102	102	50.8	V-0	130	-	-	288	20
				0.63	12	102	102	50.8	V-0	150	260	6	288	20
KB-6200G	KB-6200G	PP-KB6200G	FR-4.1	0.38	12	102	102	50.8	V-0	130	-	-	288	20
P-138	P-138	PP-138	FR-4.0	0.63	12	102	-	50.8	V-0	130	-	-	288	30
PI-515G	PI-515G	PP-PI515G	FR-4.1	0.38	12	102	102	50.8	V-0	130	-	-	288	20
Metal clad industrial laminates for use in multilayer printed wiring boards with copper on one or both sides, furnished as sheets or rolls														
KB-616(X)	KB-6160, KB-6164	KB-6060, KB-6064	FR-4.0	0.38	17	102	35	50.8	V-0	130	-	-	288	30
KB-6167A	KB-6167A	KB-6067A	FR-4.0	0.38	17	102	35	50.8	V-0	130	-	-	288	30
Metal clad industrial laminates for use in multilayer printed wiring boards with copper on one or both sides, furnished as sheets, rods or tubes														
HF-140	HF-140	PP-HF140	FR-4.1	0.38	12	102	102	50.8	V-0	130	-	-	288	30
HF-170/PP-HF170	HF-170	PP-HF170	FR-4.1	0.38	12	102	102	50.8	V-0	130	-	-	288	30
KB-6167GLD/KB-6067GLD, KB-6165GMD/KB-6065GMD, KB-3200G/PP-KB3200G and KB-6167GMD/KB-6067GMD														
	KB-6167GLD, KB-6165GMD,	KB-6067GLD, KB-6065GMD,	FR-4.1	0.38	12	102	102	50.8	V-0	130	-	-	288	30

	KB-3200G, KB-6167GMD	PP-KB3200G, KB-6067GMD												
Metal clad industrial laminates for use in multilayer printed wiring boards with copper on one or both sides,														
EEL-128	EEL-128	EP	FR-4.0	0.38	17	102	68	38.1	V-0	130	-	-	288	30
				0.63	17	102	68	50.8	V-0	130	-	-	288	30
EEL-145	EEL-145	ETP	FR-4.0	0.38	17	102	170	50.8	V-0	130	-	-	288	30
Metal clad industrial laminates for use in single layer printed wiring boards with copper on one or both sides, furnished as sheets														
FL-170	FL-170	-	FR-4.0	0.38	9	102	-	50.8	V-0	130	-	-	288	30
KB-2150G	KB-2150G	-	FR-2	0.71	35	102	-	50.8	V-0	75	-	-	265	15
				1.45	35	102	-	38.1	V-0	105	-	-	265	15
KB-3152	KB-3152	-	FR-1	0.71	35	102	-	50.8	V-0	130	-	-	288	10
KB-5150	KB-5150	-	CEM-1	0.63	17	102	-	38.1	V-0	130	-	-	288	20
KB-5252	KB-5252	-	CEM-1	0.63	17	102	-	13	V-0	130	-	-	260	10
KB-6150	KB-6150	-	FR-4.0	0.63	17	102	-	50.8	V-0	130	-	-	288	20
KB-616(X)	KB-6160, KB-6164	-	FR-4.0	0.38	17	102	-	50.8	V-0	130	-	-	288	30
KB-6160A	KB-6160A	-	FR-4.0	0.38	12	140	-	50.8	V-0	130	-	-	288	20
KB-6160C	KB-6160C	-	FR-4.0	0.38	12	102	-	50.8	V-0	130	-	-	288	20
KB-6160LC(C)	KB-6160LC(C)	-	FR-4.0	0.63	17	102	-	50.8	V-0	130	-	-	288	20
KB-6164F	KB-6164F	-	FR-4.0	0.38	12	102	-	50.8	V-0	130	-	-	288	60
KB-6165	KB-6165	-	FR-4.0	0.38	12	102	-	50.8	V-0	130	-	-	288	60
KB-6165C (ASP 1)														
	KB-6165C	-	FR-4.0	0.63	12	102	-	50.8	V-0	130	260	4	288	60
KB-6165F	KB-6165F	-	FR-4.0	0.38	12	102	-	50.8	V-0	130	-	-	288	60
KB-6165G	KB-6165G	-	FR-4.1	0.05	17	102	-	50.8	V-0	100	-	-	288	20
				0.38	17	102	-	50.8	V-0	130	-	-	288	20
KB-6165GC	KB-6165GC	-	FR-4.1	0.05	17	102	-	50.8	V-0	100	-	-	288	20
				0.38	17	102	-	50.8	V-0	130	-	-	288	20

KB-6165LE	KB-6165LE	-	FR-4.0	0.38	9	102	-	50.8	V-0	130	-	-	288	30
KB-6167A	KB-6167A	-	FR-4.0	0.38	17	102	-	50.8	V-0	130	-	-	288	30
KB-6167F	KB-6167F	-	FR-4.0	0.38	12	102	-	50.8	V-0	130	-	-	288	60
KB-6167G	KB-6167G	-	FR-4.1	0.05	17	102	-	50.8	V-0	100	-	-	288	20
				0.38	17	102	-	50.8	V-0	130	-	-	288	20
KB-6168	KB-6168	-	FR-4.0	0.38	12	102	-	50.8	V-0	130	-	-	288	60
KB-6168LE	KB-6168LE	-	FR-4.0	0.38	9	102	-	50.8	V-0	130	-	-	288	30
KB-6169GT	KB-6169GT	-	FR-15.1	0.38	17	102	-	50.8	V-0	130	-	-	288	20
				0.63	17	102	-	50.8	V-0	150	260	6	288	20
KB-6200G	KB-6200G	-	FR-4.1	0.05	17	102	-	50.8	V-0	100	-	-	288	20
				0.38	17	102	-	50.8	V-0	130	-	-	288	20
KB-7150	KB-7150	-	CEM-3.0	0.63	17	102	-	50.8	V-0	130	-	-	290	20
KB-7150C	KB-7150C	-	CEM-3.0	0.63	17	102	-	50.8	V-0	130	-	-	288	20
KB-7150T	KB-7150T	-	CEM-3.0	0.63	17	102	-	50.8	V-0	130	-	-	288	20
P-138	P-138	-	FR-4.0	0.63	12	102	-	50.8	V-0	130	-	-	288	30
PI-515G	PI-515G	-	FR-4.1	0.05	17	102	-	50.8	V-0	100	-	-	288	20
				0.38	17	102	-	50.8	V-0	130	-	-	288	20
Metal clad industrial laminates for use in single layer printed wiring boards with copper on one or both sides, furnished as sheets, rods or tubes														
HF-140	HF-140	-	FR-4.1	0.38	12	102	-	50.8	V-0	130	-	-	288	30
HF-170	HF-170	-	FR-4.1	0.38	12	102	-	50.8	V-0	130	-	-	288	30
*KB-3153**	KB-3153	-	FR-1	0.71	34	102	-	50.8	V-0	130	-	-	260	10
KB-6167GLD,KB-6165GMD,KB-3200G,KB-6167GMD														
	KB-6167GLD, KB-6165GMD, KB-3200G, KB-6167GMD	-	FR-4.1	0.38	12	102	-	50.8	V-0	130	-	-	288	30
Metal clad industrial laminates for use in single layer printed wiring boards with copper on one or both sides,														
EEL-128	EEL-128	-	FR-4.0	0.38	17	102	-	38.1	V-0	130	-	-	288	30
				0.63	17	102	-	50.8	V-0	130	-	-	288	30

EEL-145	EEL-145	-	FR-4.0	0.38	17	102	-	50.8	V-0	130	-	-	288	30
*KB-3151C**	KB-3151C	-	FR-1	0.71	17	102	-	50.8	V-0	130	-	-	260	10
KB-3151S	KB-3151S	-	FR-1	0.71	17	102	-	38.1	V-0	130	-	-	260	10
KB-5150A	KB-5150A	-	CEM-1	0.63	17	102	-	50.8	V-0	130	-	-	288	20
KB-5150H	KB-5150H	-	CEM-1	0.63	17	102	-	50.8	V-0	130	-	-	288	20
KB-5150L	KB-5150L	-	CEM-1	063	17	102	-	50.8	V-0	130	-	-	260	10
KB-6155	KB-6155	-	FR-4.0	0.38	12	102	-	50.8	V-0	130	-	-	288	60
KB-7152	KB-7152	-	CEM-3.0	0.63	17	102	-	50.8	V-0	130	-	-	288	20
Metal clad industrial laminates for use in single layer printed wiring boards with copper on one side only, furnished as sheets														
KB-1150	KB-150	-	XPC	0.71	35	117	-	25.4	HB	130	-	-	260	10
KB-5150	KB-5150	-	CEM-1	0.63	35	102	-	50.8	V-0	130	-	-	260	10
KB-5150G	KB-5150G	-	CEM-1	0.63	17	102	-	50.8	V-0	130	-	-	288	10
KB-5150HC (ASP 1)														
	KB-5150HC	-	CEM-1	0.63	17	102	-	50.8	V-0	130	245	2	288	20
KB-5252	KB-5252	-	CEM-1	0.63	17	102	-	50.8	V-0	130	-	-	288	10
P-138	P-138	-	FR-4.0	0.63	12	102	-	50.8	V-0	130	-	-	288	30
Metal clad industrial laminates for use in single layer printed wiring boards with copper on one side only, furnished as sheets, rods or tubes														
KB-3150N	KB-3150NU %	-	FR-1	0.71	17	102	-	50.8	V-0	130	-	-	260	10
KB-3151HS	KB-3151HS	-	FR-1	0.71	34	102	-	50.8	V-0	130	-	-	260	10
Metal clad industrial laminates for use in multilayer printed wiring boards with copper on one or both sides,														
KB-6155	KB-6155	KB-6055	FR-4.0	0.38	12	102	70	50.8	V-0	130	-	-	288	60

Metal clad industrial laminates (Flammability Only Recognition):

				Bld up	Clad Cond Thk			Max		Max	Assembly Solder		Solder Lts	
Metal Clad Dsg	Lam-inate Dsg	Pre-preg Dsg	ANSI Type	Min Thk (mm)	Min Ext (mic)	Max Ext (mic)	Max Int (mic)	Area Dia (mm)	Flame Class	Oper Temp (°C)	Process Temp(°C)	Process Cycles	Temp (°C)	Time (sec)
Metal clad industrial laminates for use in single layer printed wiring boards with copper on one or both sides, furnished as sheets														
KB-5152	KB-5152	-	No ANSI	0.60	-	-	-	-	V-0	-	-	-	260	10

KB-6162	KB-6162	-	No ANSI	0.63	-	-	-	-	V-0	-	-	-	288	30

% - Corresponds to Unclad values without adhesive. For declad values (single sided) see corresponding grade "KB-3150N"

& - Corresponds to Declad values with adhesive. For Unclad values see corresponding grade designation.

(ASP 1) - Assembly solder process evaluated to IPC-TM-650, 2.6.27 Thermal Stress Assembly Simulation.

* - With adhesive

X - may be 0, 4

Marking: Company name, model designation and the Recognized Component Mark for Canada, .

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