

microwave materials list



Dk @ 10MHz	MATERIAL	SUPPLIER	Df @ 10MHz	CTE (ppm/°C)			Moisture Absorption (%)	Tg °C	Peel Strength (lbs/in)	Thermal Cond. (W/m/K)	Dk Breakdown (kV/mil)	UL-94	MIL S-13949	IPC L-125A	Available Thickness. shown in mils (0.001") ¹⁰	Max. Master Blank (Ins)	COMMENTS
				X	Y	Z											
2.10	DiClad 880	Arlon	0.0009	25	34	252	0.02	X	X	0.261	> 45	X	GY	125/05	5/10/15/20/30/50/60/125	48 x 54	Woven PTFE Unidirectional
2.10	Isoclad 917	Arlon	0.0013	46	47	236	0.04	X	X	0.263	> 45	X	GP,GR	125/03-04	5/10/15/20/31/45/62	36 x 72	Non-woven PTFE/Glass
2.10	CuFlon	Polyflon	0.0045	12.9	12.9	12.9	0.01	X	8	X	X	X	X	X	0.25/0.5/1/2/3/4/5/10/15/20/31/62/125	12 x 18	Pure PTFE
2.17	CuClad 217GY & LX	Arlon	0.0009	29	28	246	0.02	X	X	0.261	> 45	V0	GY	125/05	5/10/15/20/25/31/45/62/125	48 x 54	Woven PTFE Crossplied
2.17	MYIM 217	Metclad	0.0013	35	35	260	0.02	X	12-16	0.272	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.17	MYST 217	Metclad	0.0080	25	35	260	0.02	X	12.0	0.272	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.17	TLY5A	Taconic	0.0009*	20*	20*	280*	<0.02*	X	12.0*	0.400*	X	V0	GYN	X	31 and up	36 x 48	PTFE/Glass
2.20	CuClad 217GY & LX	Arlon	0.0009	29	28	246	0.02	X	X	0.261	> 45	V0	GY	125/05	5/10/15/20/25/31/45/62/125	48 x 54	Woven PTFE Crossplied
2.20	DiClad 880	Arlon	0.0009	25	34	252	0.02	X	X	0.261	> 45	X	GY	125/05	5/10/15/20/30/50/60/125	48 x 54	Woven PTFE Unidirectional
2.20	Isoclad 917	Arlon	0.0013	46	47	236	0.04	X	X	0.263	> 45	X	GP,GR	125/03-04	5/10/15/20/31/45/62	36 x 72	Non-woven PTFE/Glass
2.20	MYIM 220	Metclad	0.0013	35	35	260	0.02	X	12-16	0.272	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.20	MYST 220	Metclad	0.0090	25	35	260	0.02	X	12.0	0.272	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.20	RT/Duriod 5880	Rogers	0.0009	31	48	237	0.015	X	X	0.200	X	X	X	X	5/10/15/20/31/62/125	18 x 48	Glass microfibre/PTFE
2.20	605	Taconic	0.0090*	20*	20*	280*	<0.02*	X	12.0*	0.400*	X	V0	X	X	5 and up	36 x 48	PTFE/Glass Equivalent to TLY-5
2.20	602	Taconic	0.0009*	20*	20*	280*	<0.02*	X	12.0*	0.400*	X	V0	X	X	5 and up	36 x 48	PTFE/Glass Equivalent to TLY-5
2.20	TLY5	Taconic	0.0009*	20*	20*	280*	<0.02*	X	12.0*	0.400*	X	V0	GYN	X	5 and up	36 x 48	PTFE/Glass
2.32	Polyguide	Polyflon	0.0005	10.8	10.8	10.8	<0.01	X	X	X	X	X	X	X	20/60/125/187	22.5 x 32	High density polyolefin
2.33	CuClad 233GY & LX	Arlon	0.0013	23	24	194	0.02	X	X	0.258	> 45	V0	GY	125/05	5/10/15/20/31/45/62/125	48 X 54	Woven PTFE Crossplied
2.33	DiClad 870	Arlon	0.0013	17	29	217	0.02	X	X	0.257	> 45	X	GY	125/05	5/10/15/20/30/40/60/125	48 x 54	Woven PTFE Unidirectional
2.33	Isoclad 933	Arlon	0.0016	31	35	203	0.05	X	X	0.263	> 45	X	GP	125/03	5/10/15/20/31/45/62	36 X 72	Non-woven PTFE/Glass
2.33	MYIM 233	Metclad	0.0013	35	35	260	0.02	X	12-16	0.272	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.33	MYST 233	Metclad	0.0011	25	35	260	0.02	X	12.0	0.272	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.33	RT/Duriod 5870	Rogers	0.0012	22	28	173	0.015	X	X	0.220	X	X	X	X	5/10/15/20/31/62/125	18 x 48	Glass microfibre/PTFE
2.33	TLY3	Taconic	0.0009*	20*	20*	280*	<0.02*	X	12.0*	0.400*	X	V0	GYN	X	3 and up	36 x 48	PTFE/Glass
2.40	CuClad 250 GX 3	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	GX	125/02	4/30/60	48 x 54	Woven PTFE Crossplied
2.40 7	DiClad 522	Arlon	0.0010	14	21	173	0.03	X	X	0.254	> 45	V0	GT	125/01	10/15/20/24/31/47/62/93/128/187/250	48 x 54	Woven PTFE Unidirectional
2.40	DiClad 527	Arlon	0.0022	14	21	182	0.03	X	X	0.254	> 45	V0	GX	125/02	20/31/62	48 x 54	Woven PTFE Unidirectional
2.40-2.60	Ultralam 2000	Rogers	0.0022	9.5	9.5	120	0.03	X	3.0	X	>50	X	X	X	40/101/147/190/300/600	18 x 48	Woven glass/PTFE
2.41	CuClad 250 LX	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	X	X	60	48 x 54	Woven PTFE Crossplied
2.42	CuClad 250 LX	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	X	X	60	48 x 54	Woven PTFE Crossplied
2.43	CuClad 250 LX	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	X	X	19.3/60	48 x 54	Woven PTFE Crossplied
2.43	MXIM 243	Metclad	0.0016	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	X	36 X 48	Woven glass/PTFE
2.43	MXST 243	Metclad	0.0016	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	X	36 X 48	Woven glass/PTFE
2.44	CuClad 250 GX 3	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	GX	125/02	14.7	48 x 54	Woven PTFE Crossplied
2.44	CuClad 250 LX	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	X	X	14.7	48 x 54	Woven PTFE Crossplied
2.45	CuClad 250 GX 3	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	GX	125/02	10/20/30/31/60/62/125	48 x 54	Woven PTFE Crossplied
2.45	CuClad 250 LX	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	X	X	30/31/60/125	48 x 54	Woven PTFE Crossplied
2.45 7	DiClad 522	Arlon	0.0010	14	21	173	0.03	X	X	0.254	> 45	V0	GT	125/01	31/62	48 x 54	Woven PTFE Unidirectional
2.45	DiClad 527	Arlon	0.0022	14	21	182	0.03	X	X	0.254	> 45	V0	GX	125/02	10/15/20/31/62/93/125	48 x 54	Woven PTFE Unidirectional
2.45	MXIM 245	Metclad	0.0016	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.45	MXST 245	Metclad	0.0016	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.45	TLT07	Taconic	0.0006*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GTN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.45	TLX0 6	Taconic	0.0019*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GXN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.48	CuClad 250 GX 3	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	GX	125/02	10/14.7/20/93	48 x 54	Woven PTFE Crossplied
2.48	CuClad 250 LX	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	X	X	10.1	48 x 54	Woven PTFE Crossplied
2.48	MXIM 248	Metclad	0.0017	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	X	36 X 48	Woven glass/PTFE

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				X	Y	Z											
2.48	MXST 248	Metclad	0.0002	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	X	36 X 48	Woven glass/PTFE
2.50 7	CuClad 250 GT 2	Arlon	0.0010	18	19	177	0.03	X	X	0.254	> 45	V0	GT	125/01	10/15/20/31/47/62/94/125/187/250	48 x 54	Woven PTFE Crossplied
2.50	CuClad 250 GX 3	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	GX	125/02	20/30/47/60/62/125	48 x 54	Woven PTFE Crossplied
2.50	CuClad 250 LX	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	X	X	30/60/62.5/90/125	48 x 54	Woven PTFE Crossplied
2.50 7	DiClad 522	Arlon	0.0010	14	21	173	0.03	X	X	0.254	> 45	V0	GT	125/01	10/15/20/24/31/47/62/128/187/250	48 x 54	Woven PTFE Unidirectional
2.50	DiClad 527	Arlon	0.0022	14	21	182	0.03	X	X	0.254	> 45	V0	GX	125/02	5/10/15/20/31/47/62/128	48 x 54	Woven PTFE Unidirectional
2.50	AD 250	Arlon	0.0030	12	15	95	0.07	X	X	0.235	> 45	V0	N/A	N/A	20/31/62	48 x 54	Woven glass/PTFE
2.50	MXIM250	Metclad	0.0017	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.50	MXST 250	Metclad	0.0017	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.50	601	Taconic	0.0019*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	X	X	5/19/20/30/31	36 x 48	PTFE/Glass. Equivalent to TLT-9/TLX-9
2.50	602	Taconic	0.0019*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	X	X	5/19/20/30/31	36 x 48	PTFE/Glass. Equivalent to TLT-8/TLX-8
2.50	TLT9 7	Taconic	0.0006*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GTN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.50	TLX9 6	Taconic	0.0019*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GXN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.53	CuClad 250 LX	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	X	X	5.3	48 x 54	Woven PTFE Crossplied
2.54	601	Taconic	0.0019*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	X	X	5/19/20/30/31	36 x 48	PTFE/Glass. Equivalent to TLT-8/TLX-8
2.55	CuClad 250 GX 3	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	GX	125/02	10/14.7/20/30/60/62/125	48 x 54	Woven PTFE Crossplied
2.55	CuClad 250 LX	Arlon	0.0022	18	19	177	0.03	X	X	0.254	> 45	V0	X	X	10.1/14.7/30/60/62.5/125	48 x 54	Woven PTFE Crossplied
2.55 7	DiClad 522	Arlon	0.0010	14	21	173	0.03	X	X	0.254	> 45	V0	GT	125/01	10/15/31/47/62/93/128/250	48 x 54	Woven PTFE Unidirectional
2.55	DiClad 527	Arlon	0.0022	14	21	182	0.03	X	X	0.254	> 45	V0	GX	125/02	5/10/15/50/31/62/93/125	48 x 54	Woven PTFE Unidirectional
2.55	MXIM 255	Metclad	0.0018	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.55	MXST 255	Metclad	0.0018	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.55 5	Norclad	Polyflon	0.0011 5	53	53	53	0.06	X	8	X	X	X	X	X	60/125	20 x 22	Thermoplastic Polyphenylene Oxide 4
2.55	602	Taconic	0.0019*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	X	X	5/19/20/30/31	36 x 48	PTFE/Glass. Equivalent to TLT-8/TLX-8
2.55	TLT8 7	Taconic	0.0006*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GTN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.55	TLX8 6	Taconic	0.0019*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GXN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.60 7	DiClad 522	Arlon	0.0010	14	21	173	0.03	X	X	0.254	> 45	V0	GT	125/01	24/31/47/62/128/250	48 x 54	Woven PTFE Unidirectional
2.60	DiClad 527	Arlon	0.0022	14	21	182	0.03	X	X	0.254	> 45	V0	GX	125/02	10/31/62	48 x 54	Woven PTFE Unidirectional
2.60	MXIM 260	Metclad	0.0019	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	X	36 X 48	Woven glass/PTFE
2.60	ComClad HF	Sheldahl	0.00325*	59*	59*	59*	0.07*	140	6.0*	0.190*	X	V2	X	X	20/30/60/90	18 x 24	Noryl Thermoset Resin
2.60	ComClad HF	Sheldahl	0.00325*	59*	59*	59*	0.07*	140	6.0*	0.190*	X	V2	X	X	30/60	24 x 110	Noryl Thermoset Resin
2.60	MXST 260	Metclad	0.0019	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	X	36 X 48	Woven glass/PTFE
2.60	TLT7 7	Taconic	0.0006*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GTN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.60	TLX7 6	Taconic	0.0019*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GXN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.65	TLT6 7	Taconic	0.0006*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GTN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.65	TLX6 6	Taconic	0.0019*	9-12*	9-12*	140*	<0.02*	X	12.0*	0.340*	X	V0	GXN	X	5/19/20/30/31	36 x 48	PTFE/Glass
2.70	AD 270	Arlon	0.0030	12	15	95	0.07	X	X	0.235	> 45	V0	N/A	N/A	15/20/31/62	48 x 54	Woven glass/PTFE
2.70	MXST 270	Metclad	0.0020	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	X	36 X 48	Woven glass/PTFE
2.70	TLC27	Taconic	0.0030*	9-12*	9-12*	70*	<0.02*	X	12.0*	0.320*	X	V0	X	X	14.5	36 x 48	PTFE/Glass
2.80	MXST 280	Metclad	0.0021	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	X	36 X 48	Woven glass/PTFE
2.94	CLTE	Arlon	0.0025	10	12	40	0.04	X	X	0.500	> 45	V0	N/A	N/A	5/10/20/24/31/47/62/93/125/150	36 x 72	Ceramic/Woven PTFE
2.94	CLTE-LC	Arlon	0.0025	10	12	35	0.04	X	X	0.500	> 45	V0	N/A	N/A	X	36 x 72	Ceramic/Woven PTFE
2.94	MXIM 294	Metclad	x	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.94	MHST 294	Metclad	0.0022	9	12	71	0.08	X	12.0	0.230	45	V0	X	YES	5/10/15	36 X 48	Ceramic filled woven glass
2.94	MXST 294	Metclad	X	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
2.94	RT/Duroid 6002	Rogers	0.0012	16	16	24	0.10	X	X	0.600	X	X	X	X	5/10/20/30/60	18 x 48	PTFE composite
2.95	AD 295	Arlon	0.0030	12	15	95	0.07	X	X	0.235	> 45	V0	N/A	N/A	62	48 x 54	Woven glass/PTFE

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Dk @ 10MHz	MATERIAL	SUPPLIER	Df @ 10MHz	CTE (ppm/°C)			Moisture Absorption (%)	Tg °C	Peel Strength (lbs/in)	Thermal Cond. (W/m/K)	Dk Breakdown (kV/mil)	UL-94	MIL S-13949	IPC L-125A	Available Thickness. shown in mils (0.001") ¹⁰	Max. Master Blank (Ins)	COMMENTS
				X	Y	Z											
2.95	TLE95	Taconic	0.0030*	9-12*	9-12*	70*	<0.02*	X	12.0*	0.320*	X	V0	X	X	5.2	36 x 48	PTFE/Glass
3.00	AD 300	Arlon	0.0030	12	15	95	0.07	X	X	0.235	> 45	V0	N/A	N/A	20/31/62	48 x 54	Woven glass/PTFE
3.00	MHST 300	Metclad	0.0023	9	12	71	0.08	X	12.0	0.230	45	V0	X	YES	10/15	36 X 48	Ceramic filled woven glass
3.00	MXST 300	Metclad	X	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	20/30/31/50/60/62/125	36 X 48	Woven glass/PTFE
3.00	RO3003	Rogers	0.0013	17	17	24	<0.10	X	6.0	0.500	X	V0	X	X	5/10/20/30/60	18 x 24	Ceramic filled PTFE
3.00	TLC30	Taconic	0.0030*	9-12*	9-12*	70*	<0.02*	X	12.0*	0.320*	X	V0	X	X	20/30/67	36 x 48	PTFE/Glass
3.05 5	Ultem	Polyflon	0.0030 5	56	56	56	0.25	X	X	X	X	X	X	X	30/60	12 x 18	Polyetherimide
3.20	GML 1032	GIL	0.0040	30	30	70	0.10	145	5.0	0.264	X	V0	X	X	30	36 x 120	Polyester
3.20	GML 1032	GIL	0.0040	30	34	70	0.05	145	5.0	0.276	X	V0	X	X	60	36 x 120	Polyester
3.20	GML 2032	GIL	0.0029	20	32	80	0.06	180	5.0	0.289	X	V0	X	X	30	36 x 120	Polyester
3.20	GML 2032	GIL	0.0029	24	25	95	0.13	180	5.0	0.269	X	V0	X	X	20	36 x 120	Polyester
3.20	MXIM 320	Metclad	x	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	30/31/50/60/62/125	36 X 48	Woven glass/PTFE
3.20	AR 320	Arlon	0.0030	10	12	71	0.08	X	X	0.230	> 45	V0	N/A	N/A	24/31/47/62/93/125	48 x 54	Ceramic filled PTFE/Glass
3.20	MHST 320	Metclad	0.0024	9	12	71	0.08	X	12.0	0.230	45	V0	X	YES	5/10/15/20	36 X 48	Ceramic filled woven glass
3.20	MXST 320	Metclad	X	12	18	150	0.05	X	12.0	0.251	50	V0	X	YES	30/31/50/60/62/125	36 X 48	Woven glass/PTFE
3.20	TLC32	Taconic	0.0030*	9-12*	9-12*	70*	<0.02*	X	12.0*	0.320*	X	V0	X	X	30 and up	36 x 48	PTFE/Glass
3.25	AD 325	Arlon	0.0030	12	15	95	0.07	X	X	0.235	> 45	V0	N/A	N/A	31/62	48 x 54	Woven glass/PTFE
3.25	AR 25N	Arlon	0.0024	17	17	70	0.08	X	X	0.446	X	N/A	N/A	N/A	6/8/10/12/18/20/24/30/60	36 x 48	Ceramic filled plastic
3.26	MHST 326	Metclad	0.0025	9	12	71	0.08	X	12.0	0.230	45	V0	X	YES	X	36 X 48	Ceramic filled woven glass
3.27	TMM 3	Rogers	0.0016	16	16	20	0.04	X	3.0	0.700	X	X	X	X	15/20/30/60/125	18 x 24	Ceramic/Thermoset Polymer
3.29	GML 1100	GIL	0.0040	22	19	76	0.10	165	7.0	0.840	X	V0	X	X	9.3	36 x 120	Polyester
3.30	LNB	Arlon	0.0030	17	17	70	0.08	90-95	4.0	0.450	X	X	X	X	19/31	X	Ceramic filled plastic
3.32	GML 1100	GIL	0.0040	22	19	80	0.03	160	5.0	0.208	X	V0	X	X	3.1	36 x 120	Polyester
3.38	GML 1034	GIL	0.0040	24	26	80	0.11	150	4.5	0.253	X	V0	X	X	20	36 x 120	Polyester
3.38	MHST 338	Metclad	0.0025	9	12	71	0.08	X	12.0	0.230	45	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Ceramic filled woven glass
3.38	RO4003	Rogers	0.0020	11	14	46	0.06	>280	6.0	0.640	X	X	X	X	8/20/32/60	18 x 24	Glass reinforced ceramic
3.48	MHST 348	Metclad	0.0030	9	12	71	0.08	X	12.0	0.230	45	V0	X	YES	5/10/15/20/30/31/50/60/62/125	36 X 48	Ceramic filled woven glass
3.48	RO4350 (B)	Rogers	0.0040	14	16	50	0.06	>280	5.0	0.620	X	V0	X	X	10/20/30/60	18 x 24	Glass reinforced ceramic
3.50	AR 350	Arlon	0.0026	33	34	107	0.08	X	X	0.310	> 45	V0	N/A	N/A	6/10/15/20/24/31/47/93/125	36 x 72	Ceramic filled PTFE/Glass
3.50	MHST 350	Metclad	0.0030	9	12	71	0.08	X	12.0	0.230	45	V0	X	YES	X	36 X 48	Ceramic filled woven glass
3.50	RF-35 8	Taconic	0.0018	19-24	19-24	64	0.02	X	>10.0	0.200*	X	V0	X	X	10/20/30/60	36 x 48	Ceramic/PTFE/Woven glass
3.58	AR25FR	Arlon	0.0035	16	18	59	0.09	X	X	0.450	X	V0	N/A	N/A	6/8/10/12/18/20/24/30/58		Ceramic filled plastic
3.60	AD 360	Arlon	0.0030	12	15	95	0.07	X	X	0.235	> 45	V0	N/A	N/A	62	48 x 54	Woven glass/PTFE
4.50	AR 450	Arlon	0.0026	30	32	102	0.08	X	X	0.320	> 45	V0	N/A	N/A	20/24/31/47/62/93	36 x 72	Ceramic filled PTFE/Glass
4.50	TMM 4	Rogers	0.0017	14	14	20	0.01	X	3.0	0.700	X	X	X	X	15/20/30/60/125	18 x 24	Ceramic/Thermoset Polymer
6.00	AR 600	Arlon	0.0035	10	13	62	0.08	X	X	0.431	> 45	V0	N/A	N/A	10/15/20/24/31/50/62/93/125	36 x 72	Ceramic filled PTFE/Glass
6.00	TMM 6	Rogers	0.0018	16	16	20	0.06	X	3.0	0.720	X	X	X	X	15/25/50/75/100	12 x 18	Ceramic/Thermoset Polymer
6.15	RO3006	Rogers	0.0025	17	17	24	<0.10	X	6.0	0.610	X	V0	X	X	5/10/25/50	18 x 24	Ceramic filled PTFE
6.15	RT/Duroid 6006	Rogers	0.0019	47	34	117	0.05	X	X	0.490	X	X	X	X	10/25/50/75/100	20 x 20	PTFE composite
9.20	TMM 10	Rogers	0.0017	16	16	20	0.09	X	3.0	0.760	X	X	X	X	15/25/50/75/100	12 x 18	Ceramic/Thermoset Polymer
9.80	TMM 10i	Rogers	0.0015	16	16	20	0.16	X	3.0	0.700	X	X	X	X	15/25/50/75/100	12 x 18	Ceramic/Thermoset Polymer
10.0 1	AR 1000	Arlon	0.0035	14	16	37	0.08	X	X	0.645	> 45	V0	N/A	N/A	5/10/15/20/24/31/47/50/62/93/100/200	36 x 72	Ceramic filled PTFE/Glass
10.0	CER-10	Taconic	0.0035	13-15	13-15	46	0.02	X	5.0	0.290*	X	V0	X	X	25/47/50/62	36 x 48	Ceramic/PTFE/Woven glass
10.20	RO3010	Rogers	0.0035	17	17	24	<0.10	X	6.0	0.660	X	V0	X	X	5/10/25/50	18 x 24	Ceramic filled PTFE
10.20	RT/Duroid 6010	Rogers	0.0023	24	24	24	0.60	X	X	0.780	X	X	X	X	10/25/50/75/100	20 x 20	PTFE composite

microwave materials list - bond films



Dk @ 10MHz	MATERIAL	SUPPLIER	Df @ 10MHz	CTE (ppm/°C)			Moisture Absorption (%)	Tg °C	Peel Strength (lbs/in)	Thermal Cond. (W/m/K)	Dk Breakdown (kV/mil)	UL-94	MIL S-13949	IPC L-125A	Available Thickness. shown in mils (0.001") ¹⁰	Max. Master Blank (Ins)	COMMENTS
				X	Y	Z											
2.07	FEP-A	DuPont	~0.00027	X	X	X	<0.01	X	X	0.195	6.5	V0	X	X	0.5/1/2/3/5/7.5/10/20	X	PTFE thermoplastic film
2.07	FEP -C	DuPont	~0.00027	X	X	X	<0.01	X	X	0.195	6.5	V0	X	X	0.5/1/2/3/5	X	PTFE thermoplastic film
2.07	FEP C-20	DuPont	~0.00027	X	X	X	<0.01	X	X	0.195	6.5	V0	X	X	0.5/1/2/5	X	PTFE thermoplastic film
2.07	FEP -L	DuPont	~0.00027	X	X	X	<0.01	X	X	0.195	6.5	V0	X	X	0.3/1/2/3/7.5	X	PTFE thermoplastic film
2.07	PFA-LP	Dupont	~0.00057	X	X	X	<0.02	X	X	0.195	6.5	V0	X	X	0.5/1/2/5/7.5/10/20/30/60/90/125	X	PTFE thermoplastic film
2.07	PFA-CLP	Dupont	~0.00057	X	X	X	<0.02	X	X	0.195	6.5	V0	X	X	1/2/5.	X	PTFE thermoplastic film
2.28	RO3001	Rogers	0.0030	X	X	X	0.05	X	X	X	X	X	X	X	1.5	12" wide roll	Bond Film
2.32	CuClad 6250	Arlon	0.0013	X	X	X	X	X	X	X	X	X	X	X	1.5	24" x 150' Roll	Bond Film
2.35	CuClad 6700	Arlon	0.0025	X	X	X	0.005	X	X	X	X	X	X	X	1.5/3.0	24" x 150' Roll	Bond Film
2.35	FV6700	Metclad	0.0025	X	X	X	X	X	X	3.75	X	X	X	X	1.5	X	Bond Film
2.35	TacBond HT 1.5	Taconic	0.0025	X	X	X	0.005	X	X	X	X	X	X	X	1.5	X	Bond Film
2.60	Speedboard C	Gore	0.0036	X	X	X	X	220	X	X	X	V0	X	X	1.5/2/2.2/3.4	18 X 24	Pre-preg
2.94	CLTE-P	Arlon	X	X	X	X	X	X	X	X	X	X	X	X	3.2	X	Pre-preg
3.0	Speedboard N	Gore	X	X	X	X	X	140	X	X	X	X	X	X	1.5/2/3/3.5/4.5	18 X 24	Pre-preg
3.17	RO4403	Rogers	0.0005	19	16	80	0.05	>280	X	0.46	X	X	X	X	4	18 X 24	Pre-preg
X	Ablefilm 5025E	E and C9	X	65	65	65	X	90	2500	3.50	X	X	X	X	2/3/4/5/6	X	Silver filled epoxy adhesive
X	Ablefilm ECF 561	E and C9	X	100	100	100	X	47	2000	1.60	X	X	X	X	4/5/6.	X	Silver filled epoxy adhesive
X	Ablefilm ECF 561E	E and C9	X	100	100	100	X	44	1700	1.60	X	X	X	X	4/5/6.	X	Silver filled epoxy adhesive
X	CF 3350	E and C9	X	65	65	65	X	90	2500	7.0	X	X	X	X	2/3/4/5/6	X	Silver filled epoxy adhesive

* All values shown are typical only. Please contact Labtech Ltd or the supplier for further details.

- 1 Varies with thickness
- 2 Thicknesses over copper
- 3 Thicknesses over dielectric
- 4 Requires solvent based processing
- 5 Tested at 3GHz
- 6 Values shown measured at 10GHz
- 7 Values shown measured at 1MHz
- 8 Tested at 1.90GHz
- 9 Emerson and Cumings
- 10 Other thicknesses may be available other than those shown. Please contact Labtech Ltd or the supplier for further details

Please Note

All values given are nominal.
No tolerances are quoted.
For all values listed as (X) please contact either Labtech Ltd or the supplier.