



QMTS2.E199230

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

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SHINEMORE TECHNOLOGY MATERIALS CO LTD

E199230

37-1 KUTING

CHUNTOU TSUN

TAYUAN HSIANG, TAOYUAN HSIEN 337 TAIWAN

Industrial laminates:

Mtl Dsg	ANSI Type	Color	Build up		R.T.I.		H				Meets 746E DSR
			Min Thk (mm)	Flame Class	Elec (°C)	Mech (°C)	H W I	H A I	V T R	C T I	
Industrial laminates, furnished as sheets.											
SM-780	No ANSI	NC	0.38	V-0	50	50	0	2	-	-	Yes
			0.63	V-0	50	50	0	2	-	-	Yes
			1.40	V-0	50	50	0	2	-	4	Yes
Industrial laminates, furnished as sheets, rods or tubes.											
SM-560	FR-4	NC (YL)	0.38	V-0	130	130	0	2	-	-	Yes
			0.63	V-0	130	140	0	2	-	-	Yes
			1.40	V-0	130	140	0	2	-	2	Yes
SM-630	No ANSI	NC (YL)	0.38	V-0	90	90	0	3	-	-	Yes
			0.63	V-0	90	90	0	1	-	-	Yes
			1.40	V-0	90	90	0	0	-	0	Yes
SM-700R, SM-700M											
	FR-4	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
SM-730R, SM-730M, SM-770R, SM-770M											
	FR-4	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
SM-750R, SM-750M											
	FR-4	NC (YL)	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
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Metal base industrial laminates:

Mtl Dsg	Color	Metal		Dielectric		R.T.I.		H			Meets 746E DSR		
		Min Thk (mm)		Min Thk (mic)	Max Thk (mic)	Flame Class	Elec (°C)	Mech (°C)	H W I	H A I		V T R	C T I
Aluminum base with Epoxy (EP) dielectric, industrial laminates, furnished as sheets.													
SM TCC-A21, SM TCC-A21B @													
	NC	0.5		55	199	V-0	90	90	5	0	-	-	-
		0.5		200	200	V-0	90	90	4	0	-	0	Yes
SM TCP-A20, SM TCP-A20B @													
	NC	0.50		50	250	V-0	50	50	4	0	-	1	Yes
SM-A10	NC	0.50		50	250	V-0	50	50	-	1	-	3	-

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
Ultrathin industrial laminates and bonding layers, furnished in sheet form, for use in multilayer printed wiring boards where the thickness is built up to the minimum specified.										
SM-560	FR-4	0.38	130	130	SM-560	75	90	SM-560B	75	90
SM-630	No ANSI	0.38	90	90	SM-630	75	90	SM-630B	75	90
SM-700R, SM-700M										
	FR-4	0.38	130	130	SM-700R, SM-700M	50	90	SM-700B	50	90
SM-730R, SM-730M, SM-770R, SM-770M										
	FR-4	0.38	130	130	SM-730R, SM-730M, SM-770R, SM-770M	50	90	SM-730B, SM-770B	50	90
SM-750R, SM-750M										
	FR-4	0.38	130	130	SM-750R, SM-750M	50	90	SM-750B	50	90
SM-780	No ANSI	0.38	50	50	SM-780	70	50	SM-780B	70	50

Metal clad industrial laminates:

Metal Clad Dsg	Laminate Dsg	Pre-preg Dsg	ANSI Type	Bld up Min Thk (mm)	Clad Cond Thk			Max Area Dia (mm)	Flame Class	Max Oper Temp (°C)	Solder Lts	
					Min Ext (mic)	Max Ext (mic)	Max Int (mic)				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.												
SM-560												
	SM-560	SM-560B	FR-4	0.55	17	204	204	50.8	V-0	130	288	20
SM-630												
	SM-630	SM-630B	No ANSI	0.50	17	204	204	50.8	V-0	90	288	20
SM-700R, SM-700M												

	SM-700R, SM-700M	SM-700B	FR-4	0.38	17	102	68	50.8	V-0	130	288	20
SM-730R, SM-730M, SM-770R, SM-770M												
	SM-730R, SM-730M, SM-770R, SM-770M	SM-730B, SM-770B	FR-4	0.38	17	204	204	50.8	V-0	130	288	20
SM-750R, SM-750M												
	SM-750R, SM-750M	SM-750B	FR-4	0.38	17	204	68	50.8	V-0	130	288	20
				0.38#	17	102	68	50.8	V-0	130	288	30
				0.63	17	102	204	50.8	V-0	130	288	20
SM-780/SM-780B												
	SM-780	SM-780B	No ANSI	0.38	12	102	204	50.8	V-0	50	288	30
				0.38	102	204	68	50.8	V-0	50	288	30
Metal clad industrial laminates for use in single layer printed wiring boards with copper on one or both sides, furnished as sheets.												
SM-560												
	SM-560	-	FR-4	0.55	17	204	-	50.8	V-0	130	288	20
SM-630												
	SM-630	-	No ANSI	0.50	17	204	-	50.8	V-0	90	288	20
SM-700R, SM-700M												
	SM-700R, SM-700M	-	FR-4	0.38	17	102	-	50.8	V-0	130	288	20
SM-730R, SM-730M, SM-770R, SM-770M												
	SM-730R, SM-770R, SM-730M, SM-770M	-	FR-4	0.38	17	204	-	50.8	V-0	130	288	20
SM-750R, SM-750M												
	SM-750R, SM-750M	-	FR-4	0.38	17	204	-	50.8	V-0	130	288	20
				0.38	17	102	-	50.8	V-0	130	288	30
SM-780												
	SM-780	-	No ANSI	0.38	12	204	-	50.8	V-0	50	288	30

Metal clad metal base industrial laminates:

Metal Clad Dsg	Laminate Dsg	Pre-preg Dsg	Metal		Dielectric		Clad Cond Thk			Max	Flame Class	Max	Solder Lts	
			Min Thk (mm)		Min Thk (mic)	Max Thk (mic)	Min Ext (mic)	Max Ext (mic)	Max Int (mic)	Area Dia (mm)		Oper Temp (°C)	Temp (°C)	Time (sec)
Aluminum base with Epoxy (EP) dielectric, Metal clad industrial laminates with copper on one side only, furnished as sheets.														
SM-A10														
	SM-A10	-	0.50		50	250	17	204	-	50.8	V-0	50	300	60
Aluminum base with Epoxy (EP) dielectric, Metal clad industrial laminates with copper on one side only.														
SM TCC-A21, SM TCC-A21B @														
	SM TCC-A21, SM TCC-A21B	-	0.5		55	200	17	204	-	50.8	V-0	90	300	60
Metal base with Epoxy (EP) dielectric, Metal clad industrial laminates with copper on one side only.														

SM TCP-A20, SM TCP-A20B @												
SM TCP-A20, SM TCP-A20B @	-	0.5	50	250	17	204	-	50.8	V-0	50	300	60

Metal clad industrial laminates (Flammability Only Recognition):

Metal Clad Dsg	Lam-inate Dsg	Pre-preg Dsg	ANSI Type	Bld up		Clad Cond Thk			Max	Flame Class	Max	Solder Lts	
				Min Thk (mm)	Min Ext (mic)	Max Ext (mic)	Max Int (mic)	Area Dia (mm)	Oper Temp (°C)		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 (Flammability Only Recognition).													
SM-560													
	SM-560	SM-560B	FR-4	0.38	-	-	-	-	-	V-0	-	288	20
SM-630													
	SM-630	SM-630B	No ANSI	0.38	-	-	-	-	-	V-0	-	288	20
Metal clad industrial laminates for use in single layer printed wiring boards with copper on one or both sides, furnished as sheets (Flammability Only Recognition).													
SM-560													
	SM-560	-	FR-4	0.38	-	-	-	-	-	V-0	-	288	20
SM-630													
	SM-630	-	No ANSI	0.38	-	-	-	-	-	V-0	-	288	20

- The minimum individual laminate/prepreg thickness is limited to 75/50 mics

@ - May be shipped as a B-stage insulation sheet without being adhered to a metal substrate. PWB manufacturer must adhere to aluminum metal base as specified above, within thickness range Recognized.

Marking: Company name and material designation on container or wrapper.

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