

**QMETS2.E198863****Polymeric Materials - Filament-wound Tubing, Industrial Laminates, Vulcanized Fiber, and Materials for Use in Fabricating Recognized Printed Wiring Boards - Component**

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GUANGDONG CHAOHUA TECHNOLOGY CO LTD

E198863

BLK B, ROOM 1311

CHUANG XIN TECH SQ

TIAN AN CYBER PARK

SHENZHEN, GUANGDONG 518040 CHINA

Industrial laminates:

Mtl Dsg	ANSI Type	Color	Build up Min Thk (mm)	Flame Class	R.T.I.		H W I	H A I	V T R	C T I	Meets 746E Non-HAL	Meets 746E DSR
					Elec (°C)	Mech (°C)						
Industrial laminates, furnished as sheets.												
M-128A (without adhesive)												
	XPC	NC	0.71	HB	130	130	4	0	-	-	-	-
			1.45	HB	130	130	4	0	-	-	-	-
Industrial laminates, furnished as sheets, rods or tubes.												
M-128	XPC	NC	0.71	HB	130	130	4	4	4	-	-	-
			1.45	HB	130	130	4	3	4	-	-	-
M-228	FR-3	NC	0.71	V-0	90	90	2	0	4	-	-	Yes
			1.45	V-0	110	110	0	0	4	4	-	Yes
M-328	FR-1	NC	0.71	V-0	130	130	3	3	4	-	-	Yes
			1.45	V-0	130	130	3	3	4	4	-	Yes
M-528F	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
Industrial laminates.												
M-128A(with adhesive)												
	XPC	NC	0.71	HB	130	130	4	0	-	-	-	-
			1.45	HB	130	130	4	0	-	4	-	-
M-428F	CEM-1	NC	0.63	V-0	130	140	0	0	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	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
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.										
M-528F/M-528FP	FR-4.0	0.38	130	130	M-528F	100	120	M-528FP	50	90
		0.63	130	140	M-528F	100	120	M-528FP	50	90

Metal clad industrial laminates:

				Bld up	Clad Cond Thk			Max		Max	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)	Temp (°C)	Time (sec)
Metal clad industrial laminates for use in multilayer printed wiring boards with copper on one or both sides.												
M-528F/M-528FP												
	M-528F	M-528FP	FR-4.0	0.38	17	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.												
M-528F												
	M-528F	-	FR-4.0	0.38	17	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.												
M-128A@												
	M-128A	-	XPC	0.71	34	102	-	50.8	HB	130	280	10
M-128F												
	M-128	-	XPC	0.8	35	102	-	50.8	HB	105	260	10
M-228F												
	M-228	-	FR-3	0.8	35	102	-	50.8	V-0	90	260	10
				1.47	35	102	-	50.8	V-0	105	260	10
M-328F												
	M-328	-	FR-1	0.8	35	102	-	50.8	V-0	130	260	10
M-428F												
	M-428F	-	CEM-1	0.63	12	102	-	50.8	V-0	130	288	20

Metal clad industrial laminates (Flammability Only Recognition):

				Bld up	Clad Cond Thk			Max		Max	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)	Temp (°C)	Time (sec)
Metal clad industrial laminates for use in single layer printed wiring boards with copper on one or both sides (Flammability Only Recognition).												

M-128A (without adhesive)												
	-	-		-	-	-	-	-	-	-	-	-

@ - with adhesive

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

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