

QMTS2.E189572 - Polymeric Materials - Filament-wound Tubing, Industrial Laminates, Vulcanized Fiber, and Materials for Use in Fabricating Recognized Printed Wiring Boards - Component

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

TAIWAN UNION TECHNOLOGY CORP

803 PO AI ST
CHUPEI, HSINCHU HSIEN 302 Taiwan

E189572

Industrial laminates:

Mtl Dsg	ANSI Type	Color	Build up		R.T.I.		H				Meets 746E Non-HAL	Meets 746E DSR
			Min Thk (mm)	Flame Class	Elec (°C)	Mech (°C)	H W I	H A I	V T R	C T I		
PTFE Industrial laminates furnished as sheets, rods or tubes												
TU-4000	No ANSI	NC	0.10	V-0	220	130	0	0	-	-	-	Yes
			0.30	V-0	220	130	0	0	-	-	-	Yes
			0.50	V-0	220	130	0	0	-	-	-	Yes
			0.75	V-0	220	160	0	0	-	-	-	Yes
			1.50	V-0	220	160	0	0	-	0	-	Yes
TU-4000A (4)	No ANSI	NC	0.10	V-0	220	170	0	0	-	-	-	Yes
			0.30	V-0	220	170	0	0	-	0	-	Yes
PTFE without reinforcement Industrial laminates furnished as sheets												
TU-5000	No ANSI	NC	0.13	V-0	200	180	0	2	-	-	-	Yes
			0.50	V-0	200	180	0	0	-	-	-	Yes
			1.50	V-0	200	180	0	0	-	0	-	Yes
TU-5001 (5)	No ANSI	NC	0.13	V-0	200	200	0	2	-	-	-	Yes
			0.50	V-0	200	220	0	0	-	0	-	Yes
Thermoset composite Industrial laminates furnished as sheets, rods or tubes												
TU-1100	No ANSI	NC	0.127	V-0	-	-	-	-	-	-	-	-
			0.25	V-0	130	120	1	2	-	-	-	Yes

			0.51	V-0	160	140	1	1	-	-	-	Yes
			0.76	V-0	160	170	0	1	-	-	-	Yes
			1.52	V-0	170	170	0	0	-	0	-	Yes
Industrial laminates furnished as sheets												
TU-883, TU-883 Sp, TU-883A, TU-883A Sp, TU-883C, TU-883C Sp, TU-885, TU-901, TU-885 Sp, TU-901 Sp												
	No ANSI	NC	0.025	V-0	130	125	4	2	-	-	Yes	Yes
			0.05	V-0	130	130	4	1	-	-	-	Yes
			0.10	V-0	140	140	0	0	-	-	-	Yes
			0.25	V-0	140	140	0	0	-	-	-	Yes
			0.38	V-0	140	140	0	0	-	-	-	Yes
			0.75	V-0	180	150	0	0	-	-	-	Yes
			1.50	V-0	180	160	0	0	-	3	-	Yes
TU-E679 FG, TU-E679 FGB												
	FR-4.1	NC,BK	0.03	VTM-0	90	90	0	4	-	-	Yes	-
			0.04	V-0	90	90	0	4	-	-	-	-
			0.06	V-0	110	130	0	4	-	-	-	-
			0.20	V-0	125	130	0	2	-	-	-	Yes
			0.38	V-0	130	130	0	2	-	-	-	Yes
			0.80	V-0	130	140	0	2	-	-	-	Yes
			1.60	V-0	130	140	0	2	0	0	-	Yes
Industrial laminates furnished as sheets, rods or tubes												
SGX-(a)	No ANSI	NC	0.10	V-0	-	-	-	-	-	-	-	-
			1.60	V-0	-	-	-	-	-	-	-	-
TU-1300, TU-1300E, TU-1300N, TU-1400, TU-1600												
	No ANSI	NC	0.20	V-0	140	150	0	4	-	-	-	-
			0.38	V-0	140	150	0	2	-	-	-	Yes
			0.63	V-0	140	150	0	2	-	-	-	Yes
			1.40	V-0	140	150	0	2	-	3	-	Yes
TU-2300, TU-2300E, TU-2300N, TU-2500, TU-2600, TU-2300Z												
	No ANSI	NC	0.025	V-0	130	125	4	2	-	-	Yes	Yes
			0.05	V-0	130	130	4	1	-	-	-	Yes
			0.10	V-0	140	140	0	0	-	-	-	Yes
			0.25	V-0	140	140	0	0	-	-	-	Yes
			0.38	V-0	140	140	0	0	-	-	-	Yes

			0.38	V-0	140	140	0	0	-	-	-	Yes
			0.75	V-0	180	150	0	0	-	-	-	Yes
			1.50	V-0	180	160	0	0	-	3	-	Yes
TU-611, TU-612	FR-4.0	NC	0.38	V-0	130	130	3	0	4	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	4	-	Yes
TU-621, TU-622	FR-4.0	NC	0.035	V-0	115	130	3	3	-	-	-	Yes
			0.080	V-0	130	130	3	3	-	-	-	Yes
			0.15	V-0	130	130	3	3	-	-	-	Yes
			0.20	V-0	130	130	3	3	-	-	-	Yes
			0.38	V-0	130	130	2	3	4	-	-	Yes
			0.63	V-0	130	140	0	3	4	-	-	Yes
			1.40	V-0	130	140	0	2	4	3	-	Yes
TU-622-5	FR-4.0	NC	0.08	V-0	130	130	1	2	-	-	-	Yes
			0.15	V-0	130	130	1	1	-	-	-	Yes
			0.20	V-0	130	130	1	1	-	-	-	Yes
			0.38	V-0	130	130	1	0	-	-	-	Yes
			0.63	V-0	130	140	0	0	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	3	-	Yes
TU-622-LE	FR-4.0	NC	0.08	V-0	130	130	0	2	-	-	-	Yes
			0.15	V-0	130	130	0	0	-	-	-	Yes
			0.20	V-0	130	130	0	0	-	-	-	Yes
			0.38	V-0	130	130	0	0	-	-	-	Yes
			0.63	V-0	130	140	0	0	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	3	-	Yes
TU-662, TU-662F, TU-668, TU-688												
	FR-4.0	NC	0.05	V-0	-	-	-	-	-	-	-	-
			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
TU-721, TU-722	FR-4.0	NC	0.08	V-0	130	130	0	3	-	-	-	Yes
			0.15	V-0	130	130	0	3	-	-	-	Yes

			0.20	V-0	130	130	0	3	-	-	-	Yes
			0.38	V-0	130	130	0	3	-	-	-	Yes

			0.38	V-0	130	130	0	3	-	-	-	Yes
			0.63	V-0	130	140	0	3	-	-	-	Yes
			1.40	V-0	130	140	0	2	-	3	-	Yes
TU-742	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	0	-	2	-	Yes
TU-742 HF (1)	FR-4.1	NC	0.03	V-0	120	90	4	3	-	-	Yes	Yes
			0.05	V-0	120	95	4	1	-	-	-	Yes
			0.10	V-0	130	120	4	1	-	-	-	Yes
			0.25	V-0	130	125	0	0	-	-	-	Yes
			0.38	V-0	130	130	0	0	-	-	-	Yes
			0.63	V-0	130	140	0	0	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	3	-	Yes
TU-747 LK, TU-748, TU-788 LK												
	FR-4.1	NC	0.03	V-0	120	90	4	2	-	-	Yes	Yes
			0.05	V-0	130	120	0	0	-	-	-	Yes
			0.10	V-0	130	130	0	0	-	-	-	Yes
			0.25	V-0	130	130	0	0	-	-	-	Yes
			0.38	V-0	130	130	0	0	-	-	-	Yes
			0.63	V-0	130	140	0	0	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	3	-	Yes
TU-752, TU-768 F, TU-768, TU-788												
	FR-4.0	NC	0.03	V-0	-	-	-	-	-	-	-	-
			0.20	V-0	130	130	3	3	-	-	-	Yes
			0.38	V-0	130	130	3	3	-	-	-	Yes
			0.63	V-0	130	140	0	3	-	-	-	Yes
			1.40	V-0	130	140	0	2	-	3	-	Yes
TU-772, TU-772-A												
	FR-4.0	NC	0.25	V-0	130	130	4	3	-	-	-	Yes
			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
TU-803, TU-803B, TU-803D, TU-803E												
	FR-4.0	NC	0.035	V-0	120	125	4	3	-	-	-	Yes

	No ANSI	NC	0.025	V-0	130	125	4	2	-	-	Yes	Yes
			0.05	V-0	130	130	4	1	-	-	-	Yes
			0.10	V-0	140	140	0	0	-	-	-	Yes
			0.25	V-0	140	140	0	0	-	-	-	Yes
			0.38	V-0	140	140	0	0	-	-	-	Yes
			0.75	V-0	180	150	0	0	-	-	-	Yes
			1.50	V-0	180	160	0	0	-	3	-	Yes
TU-862 (2)	FR-4.1	NC	0.03	V-0	120	90	4	3	-	-	Yes	Yes
			0.05	V-0	130	120	4	1	-	-	-	Yes
			0.10	V-0	130	130	4	0	-	-	-	Yes
			0.25	V-0	130	130	0	0	-	-	-	Yes
			0.38	V-0	130	130	0	0	-	-	-	Yes
			0.63	V-0	130	140	0	0	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	3	-	Yes
TU-862 HF FR-15.1, TU-862T FR-15.1, TU-865 FR-15.1, TU-863+ FR-15.1, TU-866 FR-15.1												
	FR-15.1	NC	0.03	V-0	120	115	4	1	-	-	Yes	Yes
			0.05	V-0	130	130	4	1	-	-	-	Yes
			0.10	V-0	150	140	4	0	-	-	-	Yes
			0.25	V-0	150	150	0	0	-	-	-	Yes
			0.38	V-0	150	150	0	0	-	-	-	Yes
			0.63	V-0	150	150	0	0	-	-	-	Yes
			1.40	V-0	150	150	0	0	-	3	-	Yes
TU-872, TU-872 LK, TU-872 SLK, TU-872 SLK Sp, TU-832												
	FR-4.0	NC	0.25	V-0	130	130	0	2	-	-	-	Yes
			0.38	V-0	130	130	0	2	-	-	-	Yes
			0.63	V-0	130	140	0	1	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	3	-	Yes
TU-875	FR-4.0	NC	0.20	V-0	130	130	0	0	-	-	-	Yes
			0.38	V-0	130	130	0	0	-	-	-	Yes
			0.63	V-0	130	140	0	0	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	3	-	Yes
TU-882, TU-882 RF												

	FR-4.0	NC	0.20	V-0	130	130	0	3	-	-	-	Yes
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			0.38	V-0	130	130	0	3	-	-	-	Yes
			0.63	V-0	130	140	0	0	-	-	-	Yes
			1.40	V-0	130	140	0	0	-	3	-	Yes
TU-900, TU-M700	No ANSI	NC	0.03	V-0	120	115	4	1	-	-	Yes	Yes
			0.05	V-0	130	130	4	1	-	-	-	Yes
			0.10	V-0	150	140	4	0	-	-	-	Yes
			0.25	V-0	160	155	0	0	-	-	-	Yes
			0.38	V-0	160	155	0	0	-	-	-	Yes
			0.63	V-0	180	155	0	0	-	-	-	Yes
			1.40	V-0	180	160	0	0	-	3	-	Yes
TU-930	No ANSI	NC	0.20	V-0	140	150	0	0	-	-	-	Yes
			0.38	V-0	140	150	0	0	-	-	-	Yes
			0.63	V-0	140	150	0	0	-	-	-	Yes
			1.40	V-0	140	150	0	0	-	2	-	Yes
TU-933, TU-933B, TU-933E, TU-933+, TU-933D, TU-933A, TU-943, TU-933V, TU-933 (P2), TU-943E, TU-943N, TU-943R, TU-933+ (R), TU-933+ (Z), TU-943SN, TU-943SR												
	No ANSI	NC	0.20	V-0	140	150	0	4	-	-	-	-
			0.38	V-0	140	150	0	2	-	-	-	Yes
			0.63	V-0	140	150	0	2	-	-	-	Yes
			1.40	V-0	140	150	0	2	-	3	-	Yes

Metal base industrial laminates:

		Metal		Dielectric		R.T.I.			H					
Mtl	Dsg	Min	Max	Min	Max	Flame	Elec	Mech	H	H	V	C	Meets	Meets
		Thk	Thk	Thk	Thk				W	A	T	T	746E	746E
	Color	(mm)	(mm)	(mic)	(mic)	Class	(°C)	(°C)	I	I	R	I	Non-HAL	DSR
Aluminum or Copper base with Epoxy (EP) dielectric, industrial laminates furnished as sheets														
TU-351, TU-351P\$														
	NC	0.150	-	75	215	V-0	90	90	4	0	-	0	-	Yes

Ultrathin build ups:

Build Up					Laminate			Prepreg		
Mtl Dsg	ANSI Type	Min			Mtl Dsg	Thk (mic)	TI Elec	Mtl Dsg	Thk (mic)	TI Elec
		Thk (mm)	TI Elec	TI Mech						
TU-1300, TU-1300E, TU-1300N, TU-1400, TU-1600										
	No ANSI	0.20	140	150	TU-1300, TU-1300E, TU-1300N, TU-1400, TU-	50	50	TU-1300P, TU-1300P E, TU-1300P N, TU-	50	50

					1600			1400P, TU-1600P		
TU-2300, TU-2300E, TU-2300N, TU-2500, TU-2600, TU-2300Z										
	No ANSI	0.10	140	140	TU-2300, TU-2300E, TU-2300N, TU-2500, TU-2600, TU-2300Z	25	90	TU-2300P, TU-2300P E, TU-2300P N, TU-2500P, TU-2600P, TU-2300P Z	25	90
		0.75	180	150	TU-2300, TU-2300E, TU-2300N, TU-2500, TU-2600, TU-2300Z	25	90	TU-2300P, TU-2300P E, TU-2300P N, TU-2500P, TU-2600P, TU-2300P Z	25	90
		1.50	180	160	TU-2300, TU-2300E, TU-2300N, TU-2500, TU-2600, TU-2300Z	25	90	TU-2300P, TU-2300P E, TU-2300P N, TU-2500P, TU-2600P, TU-2300P Z	25	90
TU-611, TU-612	FR-4.0	0.38	130	130	TU-611, TU-612	35	90	TU-61P	35	90
TU-621, TU-622	FR-4.0	0.38	130	130	TU-621, TU-622	50	115	TU-62P	50	115
TU-662, TU-662F, TU-668, TU-688										
	FR-4.0	0.38	130	130	TU-662, TU-662F, TU-668, TU-688	50	90	TU-66P, TU-66P F, TU-668P, TU-688P	50	90
TU-721, TU-722, TU-622-5, TU-622-LE										
	FR-4.0	0.25	130	130	TU-721, TU-722, TU-622-5, TU-622-LE	50	90	TU-72P, TU-62P-5, TU-62P-LE	50	90
TU-742	FR-4.1	0.38	130	130	TU-742	50	-	TU-74P	50	-
TU-742 HF (1)	FR-4.1	0.10	130	120	TU-742 HF, TU-742 MV, TU-747 HF, TU-747T, TU-747 HF (C)	25	90	TU-74P HF, TU-74P MV, TU-747P HF, TU-747P T, TU-747P HF (C)	25	90
		0.25	130	125	TU-742 HF, TU-742 MV, TU-747 HF, TU-747T, TU-747 HF (C)	25	90	TU-74P HF, TU-74P MV, TU-747P HF, TU-747P T, TU-747P HF (C)	25	90
		0.38	130	130	TU-742 HF, TU-742 MV, TU-747 HF, TU-747T, TU-747 HF (C)	25	90	TU-74P HF, TU-74P MV, TU-747P HF, TU-747P T, TU-747P HF (C)	25	90

		0.63	130	140	TU-742 HF, TU-742 MV, TU-747 HF, TU-747T, TU-	25	90	TU-74P HF, TU-74P MV, TU-747P HF, TU-	25	90
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					747 HF (C)			747P T, TU-7747P HF (C)		
TU-747 LK, TU-748, TU-788 LK										
	FR-4.1	0.10	130	130	TU-747 LK, TU-748, TU-788 LK	25	90	TU-747P LK, TU-748P, TU-788P LK	25	90
		0.25	130	130	TU-747 LK, TU-748, TU-788 LK	25	90	TU-747P LK, TU-748P, TU-788P LK	25	90
		0.38	130	130	TU-747 LK, TU-748, TU-788 LK	25	90	TU-747P LK, TU-748P, TU-788P LK	25	90
		0.63	130	140	TU-747 LK, TU-748, TU-788 LK	25	90	TU-747P LK, TU-748P, TU-788P LK	25	90
TU-752, TU-768 F, TU-768, TU-788										
	FR-4.0	0.20	130	130	TU-752, TU-768 F, TU-768, TU-788	25	90	TU-75P, TU-768P F, TU-768P, TU-788P	50	90
		0.38	130	130	TU-752, TU-768 F, TU-768, TU-788	50	90	TU-75P, TU-768P F, TU-768P, TU-788P	50	90
TU-772, TU-772-A										
	FR-4.0	0.25	130	130	TU-772, TU-772-A	50	90	TU-77P, TU-77P-A	50	90
TU-803, TU-803B, TU-803D, TU-803E										
	No ANSI	0.10	140	140	TU-803, TU-803B, TU-803D, TU-803E	25	90	TU-803P, TU-803P B, TU-803P D, TU-803P E	25	90
		0.75	180	150	TU-803, TU-803B, TU-803D, TU-803E	25	90	TU-803P, TU-803P B, TU-803P D, TU-803P E	25	90
		1.50	180	160	TU-803, TU-803B, TU-803D, TU-803E	25	90	TU-803P, TU-803P B, TU-803P D, TU-803P E	25	90
TU-862 (2)	FR-4.1	0.10	130	130	TU-862 (2)	25	90	TU-86P (2)	25	90
		0.25	130	130	TU-862 (2)	25	90	TU-86P (2)	25	90
		0.38	130	130	TU-862 (2)	25	90	TU-86P (2)	25	90
		0.63	130	140	TU-862 (2)	25	90	TU-86P (2)	25	90
TU-862 HF FR-15.1, TU-862T FR-15.1, TU-865 FR-15.1, TU-863+ FR-15.1, TU-866 FR-15.1/TU-862P HF FR-15.1, TU-862P T FR-15.1, TU-865P FR-15.1, TU-863P+ FR-15.1, TU-866P FR-15.1										
	FR-15.1	0.10	150	140	TU-862 HF FR-15.1, TU-862T FR-15.1, TU-865 FR-15.1, TU-863+ FR-15.1, TU-866 FR-15.1	25	90	TU-862P HF FR-15.1, TU-862P T FR-15.1, TU-865P FR-15.1, TU-863P+ FR-15.1, TU-866P FR-15.1	25	90

		0.25	150	150	TU-862 HF FR-15.1, TU-862T FR-15.1, TU-865 FR-	25	90	TU-862P HF FR-15.1, TU-862P T FR-15.1,	25	90
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					15.1, TU-863+ FR-15.1, TU-866 FR-15.1			TU-865P FR-15.1, TU- 863P+ FR-15.1, TU- 866P FR-15.1		
TU-872, TU-872 LK, TU-872 SLK, TU-872 SLK Sp, TU-832										
	FR- 4.0	0.25	130	130	TU-872, TU-872 LK, TU- 872 SLK, TU-872 SLK Sp, TU-832	50	50	TU-87P, TU-87P LK, TU-87P SLK, TU-87P SLK Sp, TU-83P	50	50
		0.63	130	140	TU-872, TU-872 LK, TU- 872 SLK, TU-872 SLK Sp, TU-832	50	50	TU-87P, TU-87P LK, TU-87P SLK, TU-87P SLK Sp, TU-83P	50	50
TU- 875	FR- 4.0	0.20	130	130	TU-875	50	90	TU-875P	50	90
		0.63	130	140	TU-875	50	90	TU-875P	50	90
TU-882, TU-882 RF										
	FR- 4.0	0.20	130	130	TU-882, TU-882 RF	50	90	TU-88P, TU-88P RF	50	90
		0.63	130	140	TU-882, TU-882 RF	50	90	TU-88P, TU-88P RF	50	90
TU-883, TU-883 Sp, TU-883A, TU-883A Sp, TU-883C, TU-883C Sp, TU-885, TU-901, TU-885 Sp, TU-901 Sp										
	No ANSI	0.10	140	140	TU-883, TU-883 Sp, TU- 883A, TU-883A Sp, TU- 883C, TU-883C Sp, TU- 885, TU-901, TU-885 Sp, TU-901 Sp	25	90	TU-883P, TU-883P Sp, TU-883P A, TU-883P A Sp, TU-883P C, TU- 883P C Sp, TU-885P, TU-901P, TU-885P Sp, TU-901P Sp	25	90
		0.75	180	150	TU-883, TU-883 Sp, TU- 883A, TU-883A Sp, TU- 883C, TU-883C Sp, TU- 885, TU-901, TU-885 Sp, TU-901 Sp	25	90	TU-883P, TU-883P Sp, TU-883P A, TU-883P A Sp, TU-883P C, TU- 883P C Sp, TU-885P, TU-901P, TU-885P Sp, TU-901P Sp	25	90
		1.50	180	160	TU-883, TU-883 Sp, TU- 883A, TU-883A Sp, TU- 883C, TU-883C Sp, TU- 885, TU-901, TU-885 Sp, TU-901 Sp	25	90	TU-883P, TU-883P Sp, TU-883P A, TU-883P A Sp, TU-883P C, TU- 883P C Sp, TU-885P, TU-901P, TU-885P Sp, TU-901P Sp	25	90
TU- 900, TU- M700	No ANSI	0.10	150	140	TU-900, TU-M700	25	90	TU-900P, TU-M700P	25	90
		0.25	160	155	TU-900, TU-M700	25	90	TU-900P, TU-M700P	25	90
		0.63	180	155	TU-900, TU-M700	25	90	TU-900P, TU-M700P	25	90
		1.40	180	160	TU-900, TU-M700	25	90	TU-900P, TU-M700P	25	90

TU- 930	No ANSI	0.20	140	150	TU-930	50	50	TU-930P	50	50
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TU-933, TU-933B, TU-933E, TU-933+, TU-933D, TU-933A, TU-943, TU-933V, TU-933 (P2), TU-943E, TU-943N, TU-943R, TU-933+ (R), TU-933+ (Z), TU-943SN, TU-943SR										
	No ANSI	0.20	140	150	TU-933, TU-933B, TU-933E, TU-933+, TU-933D, TU-933A, TU-943, TU-933V, TU-933 (P2), TU-943E, TU-943N, TU-943R, TU-933+ (R), TU-933+ (Z), TU-943SN, TU-943SR	50	50	TU-933P, TU-933P B, TU-933P E, TU-933P+, TU-933P D, TU-933P A, TU-943P, TU-933P V, TU-933P (P2), TU-943P E, TU-943P N, TU-943P R, TU-933P+ (R), TU-933P+ (Z), TU-943P SN, TU-943P SR	50	50
TU-E679 FG, TU-E679 FGB										
	FR-4.1	0.06	110	130	TU-E679 FG, TU-E679 FGB	30	90	TU-E679P FG, TU-E679P FGB	30	90
		0.20	125	130	TU-E679 FG, TU-E679 FGB	30	90	TU-E679P FG, TU-E679P FGB	30	90
		0.38	130	130	TU-E679 FG, TU-E679 FGB	30	90	TU-E679P FG, TU-E679P FGB	30	90
		0.80	130	140	TU-E679 FG, TU-E679 FGB	30	90	TU-E679P FG, TU-E679P FGB	30	90
		0.20	125	130	TU-E679 FG, TU-E679 FGB	60	110	TU-E679P FG, TU-E679P FGB	60	110
		0.38	130	130	TU-E679 FG, TU-E679 FGB	60	110	TU-E679P FG, TU-E679P FGB	60	110
		0.80	130	140	TU-E679 FG, TU-E679 FGB	60	110	TU-E679P FG, TU-E679P FGB	60	110

Metal clad industrial laminates:

Metal Clad Dsg	Lam- inate Dsg	Pre- preg Dsg	ANSI Type	Bld up	Clad Cond Thk			Max	Flame Class	Max	Assembly	Solder	Solder Lts	
				Min	Min	Max	Max	Area		Oper	Process	Process	Temp	Time
				Thk	Ext	Ext	Int	Dia		Temp	Temp(°C)	Cycles	(°C)	(sec)
Metal clad multilayer package (mass laminate) With internal circuitry And solid copper On outside surfaces, furnished As sheets														
TU-1	TU-621, TU-622	TU-62P	FR-4.0	0.38	11	171	171	50.8	V-0	130	-	-	288	60
TU-10	TU-882, TU-882 RF, TU-875	TU-88P, TU-88P RF, TU-875P	FR-4.0	0.25	9	102	102	50.8	V-0	130	-	-	288	60

TU-11, TU-	TU-933, TU-	TU-933P,	No ANSI	0.25	12	102	102	50.8	V-0	140	-	-	288	60
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11-1	933B, TU- 933E, TU- 933+, TU- 933D, TU- 933A, TU-943, TU- 933V, TU-933 (P2), TU- 943E, TU- 943N, TU- 943R, TU- 933+ (R), TU- 933+ (Z), TU- 943SN, TU- 943SR	TU- 933P B, TU- 933P E, TU- 933P+, TU- 933P D, TU- 933P A, TU- 943P, TU- 933P V, TU- 933P (P2), TU- 943P E, TU- 943P N, TU- 943P R, TU- 933P+ (R), TU- 933P+ (Z), TU- 943P SN, TU- 943P SR												
				0.38	12	102	170	50.8	V-0	140	-	-	288	60
TU- 11-2	TU-930	TU- 930P	No ANSI	0.25	12	102	102	50.8	V-0	140	-	-	288	60
				0.38	12	102	170	50.8	V-0	140	-	-	288	60
TU- 11-3	TU- 1300, TU- 1300E, TU- 1300N, TU- 1400, TU- 1600	TU- 1300P, TU- 1300P E, TU- 1300P N, TU- 1400P, TU- 1600P	No ANSI	0.25	12	102	102	50.8	V-0	140	-	-	288	60
				0.38	12	102	170	50.8	V-0	140	-	-	288	60

TU-13	TU-900, TU-	TU- 900P,	No ANSI	0.25%	8	102	102	50.8	V-0	150	-	-	288	60
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	M700	TU-M700P												
				0.38%	8	102	170	50.8	V-0	150	-	-	288	60
				1.40#	10	102	400#	50.8	V-0	150	-	-	288	60
TU-1A	TU-621, TU-622	TU-62P	FR-4.0	0.38	4	171	34	50.8	V-0	130	-	-	288	60
TU-3 (ASP1)	TU-662, TU-662F, TU-668, TU-688	TU-66P, TU-66P F, TU-668P, TU-688P	FR-4.0	0.38	11	102	204	50.8	V-0	130	-	-	288	60
				0.38	11	102	170	50.8	V-0	130	260	6	288	60
TU-4 FR-15.1 (ASP1)														
	TU-862 HF FR-15.1, TU-862T FR-15.1, TU-865 FR-15.1, TU-863+ FR-15.1, TU-866 FR-15.1	TU-862P HF FR-15.1, TU-862P T FR-15.1, TU-865P FR-15.1, TU-863P+ FR-15.1, TU-866P FR-15.1	FR-15.1	0.25	8	102	102	50.8	V-0	150	260	6	288	60
				0.38	8	102	170	50.8	V-0	150	260	6	288	60
				1.40#	10	102	400#	50.8	V-0	150	-	-	288	60
TU-4, TU-4-1 (3) (ASP1)														
	TU-862, TU-747 LK (3)	TU-86P, TU-747P LK (3)	FR-4.1	0.25	8	102	102	50.8	V-0	130	260	6	288	60
				0.38	8	102	170	50.8	V-0	130	260	6	288	60
				1.40#	10	102	400#	50.8	V-0	130	-	-	288	60

TU-4-2	TU-742 HF (1)	TU-74P HF (1)	FR-4.1	0.25%	8	102	102	50.8	V-0	125	-	-	288	60
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				0.38%	8	102	170	50.8	V-0	130	-	-	288	60
				1.40#	10	102	400#	50.8	V-0	130	-	-	288	60
TU-5@ (ASP1)	TU-752, TU-768 F, TU- 768, TU-788	TU- 75P, TU- 768P F, TU- 768P, TU- 788P	FR- 4.0	0.25	17	102	68	50.8	V-0	130	-	-	288	60
				0.38	4	102	204	50.8	V-0	130	-	-	288	60
				1.40@	17	102	408	50.8	V-0	130	-	-	288	60
				0.25	11	102	102	50.8	V-0	130	260	6	288	60
				0.38	11	102	170	50.8	V-0	130	260	6	288	60
TU-6	TU-742	TU-74P	FR- 4.1	0.38	11	102	171	50.8	V-0	130	-	-	288	60
TU-7	TU-772, TU- 772-A	TU- 77P, TU77P- A	FR- 4.0	0.25	12	102	102	50.8	V-0	130	-	-	288	60
				0.38	12	102	170	50.8	V-0	130	-	-	288	60
Metal clad multilayer package (mass laminate) With internal circuitry And solid copper On outside surfaces, furnished As sheets or rolls														
TU-12, TU- 12-1	TU-883, TU-883 Sp, TU- 883A, TU- 883A Sp, TU- 883C, TU- 883C Sp, TU- 885, TU-901, TU-885 Sp, TU- 901 Sp	TU- 883P, TU- 883P Sp, TU- 883P A, TU- 883P A Sp, TU- 883P C, TU- 883P C Sp, TU- 885P, TU- 901P, TU- 885P Sp, TU- 901P Sp	No ANSI	0.25	8	102	102	50.8	V-0	140	-	-	288	60
				0.38	8	102	170	50.8	V-0	140	-	-	288	60
				1.50	8	102	408	50.8	V-0	160	-	-	288	60
TU- 12-2	TU-803, TU-	TU- 803P,	No ANSI	0.25	8	102	102	50.8	V-0	140	-	-	288	60

	803B, TU- 803D, TU- 803E	TU- 803P B, TU- 803P D, TU- 803P E												
				0.38	8	102	170	50.8	V-0	140	-	-	288	60
				1.50	8	102	408	50.8	V-0	160	-	-	288	60
TU- 12-3	TU- 2300, TU- 2300E, TU- 2300N, TU- 2500, TU- 2600, TU- 2300Z	TU- 2300P, TU- 2300P E, TU- 2300P N, TU- 2500P, TU- 2600P, TU- 2300P Z	No ANSI	0.25	8	102	102	50.8	V-0	140	-	-	288	60
				0.38	8	102	170	50.8	V-0	140	-	-	288	60
				1.50	8	102	408	50.8	V-0	160	-	-	288	60
Metal clad multilayer package (mass laminate) With internal circuitry And solid copper On outside surfaces,														
TU-9 (ASP1)	TU-872, TU-872 LK, TU- 872 SLK, TU-872 SLK Sp, TU-832	-	FR- 4.0	0.25	10	102	102	50.8	V-0	130	260	6	288	60
				0.38	10	102	170	50.8	V-0	130	260	6	288	60
Metal clad industrial laminates For use In multilayer printed wiring boards With copper On one Or both sides, furnished As sheets														
TU-1300, TU-1300E, TU-1300N, TU-1400, TU-1600														
	TU- 1300, TU- 1300E, TU- 1300N, TU- 1400, TU- 1600	TU- 1300P, TU- 1300P E, TU- 1300P N, TU- 1400P, TU- 1600P	No ANSI	0.25	12	102	102	50.8	V-0	140	-	-	288	60
				0.38	12	102	170	50.8	V-0	140	-	-	288	60
TU- 611,	TU-611, TU-612	TU-61P	FR- 4.0	0.38	17	102	102	25.4	V-0	130	-	-	288	20

TU-612														
TU-621, TU-622	TU-621, TU-622	TU-62P	FR-4.0	0.38	4	171	34	50.8	V-0	130	-	-	288	60
				0.38	11	171	171	50.8	V-0	130	-	-	288	60
TU-662, TU-662F, TU-668, TU-688 (ASP1)														
	TU-662, TU-662F, TU-668, TU-688	TU-66P, TU-66P F, TU-668P, TU-688P	FR-4.0	0.38	11	102	204	50.8	V-0	130	-	-	288	60
				0.38	11	102	170	50.8	V-0	130	260	6	288	60
TU-721, TU-722, TU-622-5, TU-622-LE														
	TU-721, TU-722, TU-622-5, TU-622-LE	TU-72P, TU-62P-5, TU-62P-LE	FR-4.0	0.25	11	102	68	50.8	V-0	130	-	-	288	60
				0.38	11	102	171	50.8	V-0	130	-	-	288	60
TU-742	TU-742	TU-74P	FR-4.1	0.38	11	102	171	50.8	V-0	130	-	-	288	60
TU-742 HF (1)	TU-742 HF (1)	TU-74P HF (1)	FR-4.1	0.25%	8	102	102	50.8	V-0	125	-	-	288	60
				0.38%	8	102	170	50.8	V-0	130	-	-	288	60
				1.40#	10	102	400#	50.8	V-0	130	-	-	288	60
TU-752, TU-768 F, TU-768, TU-788@ (ASP1)														
	TU-752, TU-768 F, TU-768, TU-788	TU-75P, TU-768P F, TU-768P, TU-788P	FR-4.0	0.25	17	102	68	50.8	V-0	130	-	-	288	60
				0.38	4	102	204	50.8	V-0	130	-	-	288	60
				1.40@	17	102	408	50.8	V-0	130	-	-	288	60
				0.25	11	102	102	50.8	V-0	130	260	6	288	60
				0.38	11	102	170	50.8	V-0	130	260	6	288	60

TU-772, TU-772-A														
	TU-772, TU-772-A	TU-77P, TU-77P-A	FR-4.0	0.25	12	102	102	50.8	V-0	130	-	-	288	60
				0.38	12	102	170	50.8	V-0	130	-	-	288	60
TU-862 HF FR-15.1, TU-862T FR-15.1, TU-865 FR-15.1, TU-863+ FR-15.1, TU-866 FR-15.1/TU-862P HF FR-15.1, TU-862P T FR-15.1, TU-865P FR-15.1, TU-863P+ FR-15.1, TU-866P FR-15.1 (ASP1)														
	TU-862 HF FR-15.1, TU-862T FR-15.1, TU-865 FR-15.1, TU-863+ FR-15.1, TU-866 FR-15.1	TU-862P HF FR-15.1, TU-862P T FR-15.1, TU-865P FR-15.1, TU-863P+ FR-15.1, TU-866P FR-15.1	FR-15.1	0.25	8	102	102	50.8	V-0	150	260	6	288	60
				0.38	8	102	170	50.8	V-0	150	260	6	288	60
				1.40#	10	102	400#	50.8	V-0	150	-	-	288	60
TU-862, TU-747 LK (3) (ASP1)														
	TU-862, TU-747 LK (3)	TU-86P, TU-747P LK (3)	FR-4.1	0.25	8	102	102	50.8	V-0	130	260	6	288	60
				0.38	8	102	170	50.8	V-0	130	260	6	288	60
				1.40#	10	102	400#	50.8	V-0	130	-	-	288	60
TU-882, TU-882 RF, TU-875/TU-88P, TU-88P Sp, TU-88P RF, TU-875P														
	TU-882, TU-882 RF, TU-875	TU-88P, TU-88P RF, TU-875P	FR-4.0	0.25	9	102	102	50.8	V-0	130	-	-	288	60

TU-900,	TU-900, TU-	TU-900P,	No ANSI	0.25%	8	102	102	50.8	V-0	150	-	-	288	60
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TU-M700	M700	TU-M700P												
				0.38%	8	102	170	50.8	V-0	150	-	-	288	60
				1.40#	10	102	400#	50.8	V-0	150	-	-	288	60
TU-930	TU-930	TU-930P	No ANSI	0.25	12	102	102	50.8	V-0	140	-	-	288	60
				0.38	12	102	170	50.8	V-0	140	-	-	288	60
TU-933, TU-933B, TU-933E, TU-933+, TU-933D, TU-933A, TU-943, TU-933V, TU-933 (P2), TU-943E, TU-943N, TU-943R, TU-933+ (R), TU-933+ (Z), TU-943SN, TU-943SR														
	TU-933, TU-933B, TU-933E, TU-933+, TU-933D, TU-933A, TU-943, TU-933V, TU-933 (P2), TU-943E, TU-943N, TU-943R, TU-933+ (R), TU-933+ (Z), TU-943SN, TU-943SR	TU-933P, TU-933P B, TU-933P E, TU-933P+, TU-933P D, TU-933P A, TU-943P, TU-933P V, TU-933P V, TU-933P (P2), TU-943P E, TU-943P N, TU-943P R, TU-933P (R), TU-933P (Z), TU-943P SN, TU-943P SR	No ANSI	0.25	12	102	102	50.8	V-0	140	-	-	288	60
				0.38	12	102	170	50.8	V-0	140	-	-	288	60
TU-E679 FG, TU-E679 FGB														

	TU-E679	TU-E679P	FR-4.1	0.12	3	105	35	50.8	V-0	110	-	-	230 250	2400 40
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	FG, TU-E679 FGB	FG, TU-E679P FGB											260	20
				0.20	5	105	70	50.8	V-0	125	-	-	230 250 260	2400 40 20
				0.38	5	105	70	50.8	V-0	130	-	-	230 250 260	2400 40 20

Metal clad industrial laminates For use In multilayer printed wiring boards With copper On one Or both sides, furnished As sheets or rolls

TU-2300, TU-2300E, TU-2300N, TU-2500, TU-2600, TU-2300Z

	TU-2300, TU-2300E, TU-2300N, TU-2500, TU-2600, TU-2300Z	TU-2300P, TU-2300P E, TU-2300P N, TU-2500P, TU-2600P, TU-2300P Z	No ANSI	0.25	8	102	102	50.8	V-0	140	-	-	288	60
				0.38	8	102	170	50.8	V-0	140	-	-	288	60
				1.50	8	102	408	50.8	V-0	160	-	-	288	60

TU-803, TU-803B, TU-803D, TU-803E

	TU-803, TU-803B, TU-803D, TU-803E	TU-803P, TU-803P B, TU-803P D, TU-803P E	No ANSI	0.25	8	102	102	50.8	V-0	140	-	-	288	60
				0.38	8	102	170	50.8	V-0	140	-	-	288	60
				1.50	8	102	408	50.8	V-0	160	-	-	288	60

TU-883, TU-883 Sp, TU-883A, TU-883A Sp, TU-883C, TU-883C Sp, TU-885, TU-901, TU-885 Sp, TU-901 Sp

	TU-883, TU-883	TU-883P,	No ANSI	0.25	8	102	102	50.8	V-0	140	-	-	288	60
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	Sp, TU-883A, TU-883A Sp, TU-883C, TU-883C Sp, TU-885, TU-901, TU-885 Sp, TU-901 Sp	TU-883P Sp, TU-883P A, TU-883P Sp, TU-883P C, TU-883P C Sp, TU-885P, TU-901P, TU-885P Sp, TU-901P Sp												
				0.38	8	102	170	50.8	V-0	140	-	-	288	60
				1.50	8	102	408	50.8	V-0	160	-	-	288	60
Metal clad industrial laminates For use In multilayer printed wiring boards With copper On one Or both sides,														
TU-872, TU-872 LK, TU-872 SLK, TU-872 SLK Sp, TU-832 (ASP1)														
	TU-872, TU-872 LK, TU-872 SLK, TU-872 SLK Sp, TU-832	TU-87P, TU-87P LK, TU-87P SLK, TU-87P SLK Sp, TU-83P	FR-4.0	0.25	10	102	102	50.8	V-0	130	260	6	288	60
				0.38	10	102	170	50.8	V-0	130	260	6	288	60
Metal clad industrial laminates For use In Single layer printed wiring boards With copper On one Or both sides, furnished As sheets														
TU-1300, TU-1300E, TU-1300N, TU-1400, TU-1600														
	TU-1300, TU-1300E, TU-1300N, TU-1400, TU-1600	-	No ANSI	0.25	12	102	-	50.8	V-0	140	-	-	288	60
TU-611, TU-612	TU-611, TU-612	-	FR-4.0	0.38	17	102	-	50.8	V-0	130	-	-	288	20
TU-621,	TU-621, TU-622	-	FR-4.0	0.035	12	102	-	50.8	V-0	115	-	-	288	60

TU-622														
				0.080	12	102	-	50.8	V-0	130	-	-	288	60
				0.15	4	408	-	50.8	V-0	130	-	-	288	60
TU-662, TU-662F, TU-668, TU-688 (ASP1)														
	TU-662, TU-668, TU-688	-	FR-4.0	0.38	11	102	-	50.8	V-0	130	260	6	288	60
TU-721, TU-722, TU-622-5, TU-622-LE														
	TU-721, TU-722, TU-622-5, TU-622-LE	-	FR-4.0	0.25	11	102	-	50.8	V-0	130	-	-	288	60
TU-742	TU-742	-	FR-4.1	0.38	11	102	-	50.8	V-0	130	-	-	288	60
TU-742 HF (1)	TU-742 HF (1)	-	FR-4.1	0.25	8	102	-	50.8	V-0	125	-	-	288	60
				0.38	8	102	-	50.8	V-0	130	-	-	288	60
TU-752, TU-768 F, TU-768, TU-788 (ASP1)														
	TU-752, TU-768 F, TU-768, TU-788	-	FR-4.0	0.38	4	102	-	50.8	V-0	130	-	-	288	60
				0.25	11	102	-	50.8	V-0	130	260	6	288	60
TU-772, TU-772-A														
	TU-772, TU-772-A	-	FR-4.0	0.25	12	102	-	50.8	V-0	130	-	-	288	60
TU-862 HF FR-15.1, TU-862T FR-15.1, TU-865 FR-15.1, TU-863+ FR-15.1, TU-866 FR-15.1 (ASP1)														

	TU-862 HF FR-	-	FR-15.1	0.25	8	102	-	50.8	V-0	150	260	6	288	60
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	15.1, TU- 862T FR- 15.1, TU-865 FR- 15.1, TU- 863+ FR-15.1													
TU-862, TU-747 LK (3) (ASP1)														
	TU-862 (3)	-	FR- 4.1	0.25	8	102	-	50.8	V-0	130	260	6	288	60
TU-882, TU-882 RF, TU-875														
	TU- 882,TU- 882 RF, TU-875	-	FR- 4.0	0.25	9	102	-	50.8	V-0	130	-	-	288	60
TU- 900, TU- M700	TU-900	-	No ANSI	0.25	8	102	-	50.8	V-0	150	-	-	288	60
TU- 930	TU-930	-	No ANSI	0.25	12	102	-	50.8	V-0	140	-	-	288	60
TU-933, TU-933B, TU-933E, TU-933+, TU-933D, TU-933A, TU-943, TU-933V, TU-933 (P2), TU-943E, TU-943N, TU-943R, TU-933+ (R), TU-933+ (Z), TU-943SN, TU-943SR														

	TU-933, TU-	-	No ANSI	0.25	12	102	-	50.8	V-0	140	-	-	288	60
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	933B, TU- 933E, TU- 933+, TU- 933D, TU- 933A, TU-943, TU- 933V, TU-933 (P2), TU- 943E, TU- 943N, TU- 943R, TU- 933+ (R), TU- 933+ (Z), TU- 943SN, TU- 943SR													
TU-E679 FG, TU-E679 FGB														
	TU- E679 FG, TU- E679 FGB	-	FR- 4.1	0.06	5	105	-	50.8	V-0	110	-	-	230 250 260	2400 40 20
				0.12	3	105	-	50.8	V-0	110	-	-	230 250 260	2400 40 20
				0.20	5	105	-	50.8	V-0	125	-	-	230 250 260	2400 40 20
				0.38	5	105	-	50.8	V-0	130	-	-	230 250 260	2400 40 20
Metal clad industrial laminates For use In Single layer printed wiring boards With copper On one Or both sides, furnished As sheets or rolls														
TU-2300, TU-2300E, TU-2300N, TU-2500, TU-2600, TU-2300Z														

	TU- 2300,	-	No ANSI	0.25	8	102	-	50.8	V-0	140	-	-	288	60
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	TU-2300E, TU-2300N, TU-2500, TU-2600, TU-2300Z													
				1.50	8	102	-	50.8	V-0	160	-	-	288	60
TU-803, TU-803B, TU-803D, TU-803E														
	TU-803, TU-803B, TU-803D, TU-803E	-	No ANSI	0.25	8	102	-	50.8	V-0	140	-	-	288	60
				1.50	8	102	-	50.8	V-0	160	-	-	288	60
TU-883, TU-883 Sp, TU-883A, TU-883A Sp, TU-883C, TU-883C Sp, TU-885, TU-901, TU-885 Sp, TU-901 Sp														
	TU-883, TU-883 Sp, TU-883A, TU-883A Sp, TU-883C, TU-883C Sp, TU-885, TU-901, TU-885 Sp, TU-901 Sp	-	No ANSI	0.25	8	102	-	50.8	V-0	140	-	-	288	60
				1.50	8	102	-	50.8	V-0	160	-	-	288	60
Metal clad industrial laminates For use In Single layer printed wiring boards With copper On one Or both sides,														
TU-872, TU-872 LK, TU-872 SLK, TU-872 SLK Sp, TU-832 (ASP1)														
	TU-872, TU-872 LK, TU-872 SLK, TU-872 SLK Sp, TU-832	-	FR-4.0	0.25	10	102	-	50.8	V-0	130	260	6	288	60

Metal clad metal base industrial laminates:

			Metal		Dielectric		Clad Cond Thk		Max		Max		Assembly Solder		Solder Lts		
Metal	Lam-	Pre-	Min	Max	Min	Max	Min	Max	Max	Area	Oper		Temp	Process	Process	Temp	Time
Clad	inate	preg	Thk	Thk	Thk	Thk	Ext	Ext	Int	Dia	Flame	Temp	Process	Process	Temp	Temp	Time
Dsg	Dsg	Dsg	(mm)	(mm)	(mic)	(mic)	(mic)	(mic)	(mic)	(mm)	Class	(°C)	Temp(°C)	Cycles	(°C)	(sec)	
Aluminum or Copper base With Epoxy (EP) dielectric, Metal clad industrial laminates With copper On one Or both sides, furnished As sheets																	
TU-351, TU-351P\$																	
	TU-351, TU-351P\$	-	0.150		75	215	17	102	-	50.8	V-0	90	-	-	288	60	

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)
PTFE Metal clad industrial laminates For use In Single layer printed wiring boards With copper required On both sides, furnished As sheets, rods or tubes														
TU-4000	TU-4000	-	No ANSI	0.30	9	102	-	50.8	V-0	130	-	-	288	60
				0.75	9	102	-	50.8	V-0	160	-	-	288	60
TU-4000A (4)	TU-4000A	-	No ANSI	0.30	9	102	-	50.8	V-0	150	-	-	288	60
PTFE without reinforcement Metal clad industrial laminates For use In Single layer printed wiring boards With copper required On both sides, furnished As sheets														
TU-5000 (ASP1)	TU-5000	-	No ANSI	0.13	10	102	-	50.8	V-0	180	260	6	288	60
TU-5001 (5) (ASP1)														
	TU-5001	-	No ANSI	0.13	10	102	-	50.8	V-0	200	260	6	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)	Oper Flame Class	Temp (°C)	Process Temp(°C)	Process Cycles	Temp (°C)	Time (sec)
Metal clad multilayer package (mass laminate) With internal circuitry And solid copper On outside surfaces, furnished As sheets														

TU-5@ (ASP1)	TU-752,	TU-75P,	FR-4.0	0.20	-	-	-	-	V-0	-	260	6	288	60
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	TU-768 F, TU-768, TU-788	TU-768P F, TU-768P, TU-788P												
Metal clad industrial laminates For use In multilayer printed wiring boards With copper On one Or both sides, furnished As sheets														
TU-752, TU-768 F, TU-768, TU-788@ (ASP1)														
	TU-752, TU-768 F, TU-768, TU-788	TU-75P, TU-768P F, TU-768P, TU-788P	FR-4.0	0.20	-	-	-	-	V-0	-	260	6	288	60
Metal clad industrial laminates For use In Single layer printed wiring boards With copper On one Or both sides, furnished As sheets														
TU-662, TU-662F, TU-668, TU-688 (ASP1)														
	TU-662, TU-662F, TU-668, TU-688	-	FR-4.0	0.05	-	-	-	-	V-0	-	-	-	288	60
TU-742 HF (1)	TU-742 HF (1)	-	FR-4.1	0.05	-	-	-	-	V-0	-	-	-	288	60
TU-752, TU-768 F, TU-768, TU-788 (ASP1)														
	TU-752, TU-768 F, TU-768, TU-788	-	FR-4.0	0.03	-	-	-	-	V-0	-	-	-	288	60
				0.20	-	-	-	-	V-0	-	260	6	288	60
TU-862 HF FR-15.1, TU-862T FR-15.1, TU-865 FR-15.1, TU-863+ FR-15.1, TU-866 FR-15.1 (ASP1)														

	TU-862	-	FR-15.1	0.05	-	-	-	-	V-0	-	-	-	288	60
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	HF FR- 15.1, TU- 862T FR- 15.1, TU- 865 FR- 15.1, TU- 863+ FR- 15.1, TU- 866 FR- 15.1													
TU-862, TU-747 LK (3) (ASP1)														
	TU- 862, TU- 747 LK (3)	-	FR- 4.1	0.05	-	-	-	-	V-0	-	-	-	288	60
TU- 900, TU- M700	TU- 900, TU- M700	-	No ANSI	0.05	-	-	-	-	V-0	-	-	-	288	60

- For a 400 micron maximum internal conductor thickness, a corresponding minimum individual laminate sheet thickness of 0.13 mm, and a minimum individual prepreg sheet thickness of 0.05 mm is required.

\$ - The designation of TU-351P apply to [B-stage Dielectric material only with or without single side copper] construction. TU-351P shall be applied to Aliminum or copper metal substrat as specified within thickness range recognixed on single or double sided.

% - Minimum individual laminate sheet thickness 0.025 mm, and minimum individual preperg sheet thickness 0.025 mm.

(1) - Alternative grades : TU-742 HF, TU-742 MV, TU-747 HF, TU-747T, TU-747 HF (C)/ TU-74P HF, TU-74P MV, TU-747P HF, TU-747P T, TU-747P HF (C)

(2) - Alternative grades : TU-862, TU-863, TU-862 HF, TU-862 LK, TU-862S, TU-865, TU-868, TU-815, TU-862T, TU-787 LK, TU-863+, TU-863+ (Z), TU-877 HF, TU-863+ (H)/TU-86P, TU-863P, TU-86P HF, TU-86P LK, TU-862P S, TU-84P NF, TU-84P MF, TU-84P LF, TU-865P, TU-868P, TU-815P, TU-862P T, TU-787P LK, TU-863P+, TU-863P+ (Z), , TU-877P HF, TU-863P+ (H)

(3) - Family grades : TU-862, TU-863, TU-862 HF, TU-862 LK, TU-862S, TU-747 LK, TU-865, TU-868, TU-815, TU-862T, TU-787 LK, TU-863+, TU-863+ (Z), TU-877 HF, TU-748, TU-788 LK, TU-863+ (H)/ TU-86P, TU-863P, TU-86P HF, TU-86P LK, TU-862P S, TU-84P NF, TU-84P MF, TU-84P LF, TU-747P LK, TU-865P, TU-868P, TU-815P, TU-862P T, TU-787P LK, TU-863P+, TU-863P+ (Z), TU-877P HF, TU-748P, TU-788P LK, TU-863P+ (H)

(4) - Limited max. thickness to 0.30 mm.

(5) - Limited max. thickness to 0.50 mm.

(a) - three or four digit number denoting material thickness in micron

(ASP1) - Assembly solder process evaluated to IPC-TM-650, 2.6.27 Thermal Stress Assembly Simulation.

@ - For a 1.40 minimum build up, a 0.125mm laminate with a 0.05mm prepreg is required.



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