

Manufacturer	Name	Tg	Td	Dielectric Constant (Permittivity) at 50% Resin Content							Dissipation Factor		Pb-free Assy.?	Characteristics
				1 MHz	100 MHz	1 GHz	2 GHz	2.5 GHz	5 GHz	10 GHz	At Listed GHz ()	IPC-4101C		
Isola	FR406	170°C	300°C	N/A	4.00	3.95	3.93	N/A	3.92	3.92	(2) 3.9300, (10) 3.9200	/21, /24, /26, /28	No	Isola's standard high Tg FR-4 laminate
Isola	FR406HR	190°C	340°C	N/A	3.91	3.86	3.83	N/A	3.81	3.81	(2) 0.0190, (10) 0.0195	/21, /24, /26, /121, /124	Yes	Non-phenolic, high thermal RoHS applications
Isola	FR408	180°C	360°C	N/A	3.81	3.78	3.77	N/A	3.75	3.75	(2) 0.0120, (10) 0.0125	/24, /121, /124	Yes	Low Dk, Low Df for hi-speed apps. High Td
Isola	FR408HR	200°C	360°C	N/A	3.72	3.69	3.68	N/A	3.64	3.65	(2) 0.0092, (10) 0.0095	/21, /24, /121, /124, /129	Yes	Maximum thermal performance. Low Dk & Df
Isola	370HR	180°C	340°C	N/A	4.24	4.17	4.04	N/A	3.92	3.92	(2) 0.0210, (10) 0.0250	/21, /24, /26, /98, /99, /101, /126	Yes	Improved thermal performance. Low expansion
Isola	IS410	180°C	350°C	N/A	3.96	3.90	3.97	N/A	3.87	3.87	(2) 0.0200, (10) 0.0230	/21, /24, /26, /28, /121, /124	Yes	Multiple thermal excursions. CAF resistance
Isola	IS415	200°C	370°C	N/A	3.86	3.83	3.82	N/A	3.80	3.80	(2) 0.0120, (10) 0.0125	/21, /24, /26, /28, /121, /124, /129	Yes	Signal integrity, high thermal, excellent IST
Isola	IS620i	225°C	364°C	N/A	3.59	3.58	3.58	N/A	3.54	3.54	(2) 0.0060, (10) 0.0071	/30	Yes	High speed, low loss, high Tg & Td
Isola	IS680 3.38	192°C	376°C	N/A	N/A	N/A	3.38	N/A	3.38	3.38	(2) 0.0035, (10) 0.0035	N/R	Yes	RF/Microwave high frequency
Isola	P95	260°C	416°C	N/A	3.90	3.95	3.76	N/A	3.74	3.74	(2) 0.0170, (8) 0.0210	/40, /41, /42	Yes	Non-brominated Polyimide, non-MDA
Isola	P96	260°C	416°C	N/A	3.90	3.95	3.76	N/A	3.74	3.74	(2) 0.0170, (8) 0.0210	/40, /41, /42	Yes	V-0 rated Polyimide, non-MDA
Isola	GETEK	180°C	345°C	N/A	3.81	3.78	3.60	N/A	3.50	3.50	(2) 0.009, (10) 0.0100	/25	No	PPO/Epoxy Low Dk & Df
Isola	G200	180°C	325°C	N/A	3.80	3.70	3.70	N/A	3.65	3.65	(2) 0.0130, (10) 0.0150	/30	No	BT/Epoxy for PCBs
Nelco	N4000-6	175°C	325°C	4.30	N/A	4.10	N/A	4.00	N/A	N/A	(1 MHz) 0.0230, (2.5) 0.0220	/24, /26	No	Nelco's standard high Tg FR-4 laminate
Nelco	N4000-7	165°C	425°C	4.10	N/A	4.00	N/A	N/A	N/A	3.80	(2.5) 0.0170, (10) 0.0170	/94	Yes	Halogen-free epoxy, High Td & CAF resistant
Nelco	N4000-11	175°C	345°C	4.30	N/A	4.10	N/A	3.80	N/A	N/A	(1 MHz) 0.0160, (2.5) 0.0200	/28, /83, /98, /99	Yes	CAF resistant high Tg multifunctional, DICY free
Nelco	N4000-12	190°C	662°C	N/A	N/A	3.70	N/A	N/A	N/A	3.60	(2.5) 0.0080, (10) 0.0080	/29	</=260°C	High speed, low loss, high Tg & Td
Nelco	N4000-13	210°C	350°C	3.70	N/A	N/A	N/A	3.70	N/A	3.60	(2.5) 0.0090, (10) 0.0090	/29	</=260°C	High speed multifunctional. Precise Zo control
Nelco	N4000-13SI	210°C	350°C	3.40	N/A	N/A	N/A	3.20	N/A	3.20	(2.5) 0.0080, (10) 0.0080	/29	</=260°C	High speed low loss optimum signal Integrity
Nelco	N4000-13EP	410°C	662°C	3.70	N/A	N/A	N/A	3.70	N/A	3.60	(2.5) 0.0090, (10) 0.0090	/29	</=260°C	N4000-13 performance + enhanced thermal
Nelco	N4000-13EPSI	410°C	662°C	3.40	N/A	N/A	N/A	3.20	N/A	3.20	(2.5) 0.0080, (10) 0.0080	/29	</=260°C	N4000-13EP with SI e-glass for signal integrity
Nelco	N4000-29	185°C	350°C	4.50	N/A	4.30	N/A	N/A	N/A	4.00	(2.5) 0.0150, (10) 0.0170	/28, /98, /99, /126	Yes	RoHS, Pb-free low-CTE multifunctional epoxy
Nelco	N5000	185°C	334°C	N/A	N/A	3.80	N/A	3.60	N/A	3.60	(2.5) 0.0140, (10) 0.0140	/30	</=260°C	BT/Epoxy for PCBs
Nelco	N7000-1	260°C	389°C	N/A	N/A	3.90	N/A	3.90	N/A	3.90	(2.5) 0.0150, (10) 0.0160	/40, /41, /42	Yes	Polyimide, low Z-axis expansion, high thermal
Rogers	RO4003C	280°C	425°C	N/A	N/A	N/A	N/A	N/A	N/A	3.38	(2.5) 0.0021, (10) 0.0027	/10	Yes	Glass reinforced hydrocarbon ceramic laminate
Rogers	RO4350B	280°C	390°C	N/A	N/A	N/A	N/A	N/A	N/A	3.48	(2.5) 0.0031, (10) 0.0037	/11	Yes	94V-0 glass reinforced hydrocarbon ceramic
Rogers	Theta	185°C	380°C	N/A	N/A	3.90	N/A	N/A	N/A	4.01	(1) 0.0092, (10) 0.0120	/130	Yes	Pb-free, halogen free, low-CTE
Panasonic	Megtron 4	176°C	360°C	4.07	4.03	4.00	3.97	N/A	N/A	3.91	(1) 0.0050	/91, /102	Yes	High speed low loss
Panasonic	Megtron 6	185°C	410°C	N/A	N/A	3.71	3.64	N/A	N/A	3.61	(2) 0.0020	/91, /102	Yes	High speed low loss optimum signal Integrity