



Your Dreams, Our Challenge

IPC-4101E Slash Sheet Reference Guide

IPC Slash Sheet	Part Number	DK (nominal)	Description
IPC-4101E/21 IPC-4101E/24 IPC-4101E/26	N4000-6 N4105-6 (Laminate) N4205-6 (Prepreg)	4.10	High Tg Multifunctional Epoxy Flame Rating: 94 V-0
	N4000-6FC, N4000-6NF N4105-6FC (Laminate) N4205-6FC (Prepreg)	4.10	
IPC-4101E/29	N4000-12, N4000-12SI N4103-12 (Laminate) N4203-12 (Prepreg)	3.60, 3.30	High Speed, Low Loss, Modified Epoxy Flame Rating: 94 V-0 * Microwave Performance, Modified Epoxy Flame Rating: 94 V-0
	N4000-13, N4000-13SI N4103-13 (Laminate) N4203-13 (Prepreg)	3.60, 3.20	
	N4000-13EP, N4000-13EPSI N4103-13EP (Laminate) N4203-13EP (Prepreg)	3.60, 3.20	
	N4350-13RF *, N4380-13RF * N4^^-13RF (Laminate) * N4^^-13RF (Prepreg) *	3.50, 3.80	
	Mercurywave 9350 * Mercurywave 9350 (Laminate) * Mercurywave 9350 (Prepreg) *	3.50	
IPC-4101E/30	N5000 N5105## (Rigid Laminate ≥ 0.020) N5205## (Thin Laminate < 0.020) N5305## (Prepreg)	3.60	BT Epoxy Flame Rating: 94 V-0
IPC-4101E/40 IPC-4101E/41	N7000-2HT N7105-2 HT (Rigid Laminate ≥ 0.020) N7205-2 HT (Thin Laminate < 0.020)	3.50	Non-MDA Toughened Polyimide Flame Rating: 94 V-0
	N7000-3 * N7105-3 (Rigid Laminate ≥ 0.020) * N7205-3 (Thin Laminate < 0.020) * N7305-3 (Prepreg) *	3.50	* Toughened Polyimide Flame Rating: 94 V-1
	N7000-1 † N7101-1 (Rigid Laminate ≥ 0.020) † N7201-1 (Thin Laminate < 0.020) † N7301-1 (Prepreg) †	3.90	† Halogen-Free Polyimide Flame Rating: 94 HB

IPC-4101E/42	N7000-2HT N7105-2 HT (Rigid Laminate ≥ 0.020) N7205-2 HT (Thin Laminate < 0.020)	3.50	Non-MDA Toughened Polyimide Flame Rating: 94 V-0
	N7000-3 * N7105-3 (Rigid Laminate ≥ 0.020) * N7205-3 (Thin Laminate < 0.020) * N7305-3 (Prepreg) *	3.50	* Toughened Polyimide Flame Rating: 94 V-1
	N7000-3F † N7105-3 (Rigid Laminate ≥ 0.020) *	3.5	† Toughened and Ceramic Filled Polyimide
IPC-4101E/71	N8000 N8105## (Rigid Laminate ≥ 0.020) * N8205## (Thin Laminate < 0.020) * N8305## (Prepreg) *	3.50	Cyanate Ester Flame Rating: 94 V-0
IPC-4101E/72 IPC-4101E/73	N4800-20, N4800-20SI N4805-20 (Laminate) N4802-20 (Prepreg)	3.50, 3.24	High Speed, Low Loss, Modified Epoxy Flame Rating: 94 V-0
IPC-4101E/98	N4000-7, N4000-7SI N4105-7 (Laminate) N4205-7 (Prepreg)	4.00, 3.60	High Tg Multifunctional Epoxy Flame Rating: 94 V-0
	N4000-29, N4000-29NF N4105-29 (Laminate) N4205-29 (Prepreg)	4.30	
IPC-4101E/99	N4000-29 N4105-29 (Laminate) N4205-29 (Prepreg)	4.30	Lead Free, High Tg Multifunctional Epoxy Flame Rating: 94 V-0
IPC-4101E/102	Meteorwave 1000, 1000NF Meteorwave 1000 L (Laminate) Meteorwave 1000 P (Prepreg)	3.40	Very to Extreme Low Loss, Very High Reliability PPE Flame Rating: 94 V-0 * Ultra to Extreme Low Loss, Very High Reliability PPE, Controlled 3.5 Dk Flame Rating: 94 V-0
	Meteorwave 2000 Meteorwave 2000 L (Laminate) Meteorwave 2000 P (Prepreg)	3.20	
	Meteorwave 3000, 3350 * Meteorwave 3000 L (Laminate) Meteorwave 3000 P (Prepreg)	3.60, 3.50	
	Meteorwave 4000, M-Ply Meteorwave 4000 L (Laminate) Meteorwave 4000 P (Prepreg)	3.40, 3.38	
	Meteorwave 8000, 8350 * Meteorwave 8000 L (Laminate) Meteorwave 8000 P (Prepreg)	3.28, 3.50	
	Meteorwave 8300 Meteorwave 8000 L (Laminate) Meteorwave 8000 P (Prepreg)	3.00	
	Meteorwave M1 Meteorwave M1 (Laminate) Meteorwave M1P (Prepreg)	3.1	
IPC-4101E/124 IPC-4101E/126 IPC-4101E/129	N4000-29 N4105-29 (Laminate) N4205-29 (Prepreg)	4.30	Lead Free, High Tg Multifunctional Epoxy Flame Rating: 94 V-0

IPC-4103B Slash Sheet Reference Guide

IPC Slash Sheet	Part Number	DK (nominal)	Description
IPC-4103A/200	605 NY9208, 217, 220 TLP-5 TLY-0 TLY-5 TLY-5A TLY-5Z	2.17, 2.20 2.08 – 2.20 2.20 2.055 2.20 2.17 2.2	PTFE/Woven Glass
IPC-4103A/210	605 NY9233 TLY-2 TLY-3, TLY-3FF*	2.21 - 2.33 2.33 2.35 2.33	PTFE/Woven Glass *PTFE/Ceramic Woven Glass
IPC-4103A/220	601 602 NX9240, 245, 250, 255, 260, 270 TF-260 TLT TLX	2.435 - 2.80 2.45 - 2.80 2.40 – 2.70 2.60 2.45 - 2.65 2.40 - 2.65	PTFE/Woven Glass *PTFE/Ceramic Woven Glass
IPC-4103A/230	603 EZ-IO-F* HF-300F ** NH9294*, 300* NL9294*, 300* NX9294, 300 RF-30* TLC TLE TSM-DS3*, DS3b*, DS3M* NF-30* Meteorwave 8300 [†] Meteorwave 8000 L (Laminate) [†]	2.75 - 3.00 2.80 3.00 2.94 – 3.00 2.94 – 3.00 2.94 – 3.00 3.00 2.75 - 3.00 2.94 - 2.95 2.94 - 3.00 3.00 3.00	PTFE/Woven Glass *PTFE/Ceramic Woven Glass ** Hydrocarbon [†] Ultra Low Loss, Very High Reliability PPE Flame Rating: 94 V-0
IPC-4103A/240	HF-330**, 340**, 350F**, 35FTC** NH9320*, 338*, 348* NL9320*, 350* NX9320 RF-35*, 35A2*, 35HTC*, 35P*, 35TC* TLC-32 TLC-338 TLC-35 TLF-35A* Mercurywave 9350 [†] Mercurywave 9350 (Laminate) [†] Mercurywave 9350 (Prepreg) [†] Meteorwave 3350 ^{††} Meteorwave 3000 L (Laminate) ^{††} Meteorwave 3000 P (Prepreg) ^{††}	3.35 – 3.55 3.20 – 3.48 3.20 – 3.50 3.20 3.50 3.20 3.38 3.50 3.50 3.50 3.50	PTFE/Woven Glass *PTFE/Ceramic Woven Glass ** Hydrocarbon [†] Microwave Performance, Modified Epoxy Flame Rating: 94 V-0 ^{††} Ultra to Extreme Low Loss, Very High Reliability PPE, Controlled 3.5 Dk Flame Rating: 94 V-0

IPC-4103A/240	Meteorwave 8350 ⁺⁺ Meteorwave 8000 L (Laminate) ⁺⁺ Meteorwave 8000 P (Prepreg) ⁺⁺	3.50	
IPC-4103A/250	TRF-41 TRF-43 TRF-45	4.10 4.30 4.50	PTFE/Ceramic Woven Glass
IPC-4103A/270	RF-60A RF-60TC	6.15 6.15	PTFE/Ceramic Woven Glass
IPC-4103A/280	CER-10 RF-10	9.00 - 10.40 10.20	PTFE/Ceramic Woven Glass
IPC-4103A/520	fastRise FR-25 fastRise FR-26, FR-27	2.45 2.64	PTFE/Ceramic/Adhesive
IPC-4103A/530	TPG-30 [†] fastRise FR-27, FR-28 fastRise FR-EZpure Meteorwave 8300 * Meteorwave 8000 P (Prepreg) *	3.00 2.74 2.80 3.00	[†] PTFE/Ceramic BT Woven Glass Prepreg PTFE/Ceramic/Adhesive Hydrocarbon/Silica/Non-Reinforced * Ultra Low Loss, Very High Reliability PPE Flame Rating: 94 V-0
IPC-4103A/540	TPG-32 TPG-35 ELL 101 * ELL 102 * ELL 103 *	3.20 3.50 3.05 3.03 3.03	PTFE/Ceramic BT Woven Glass Prepreg * Extreme Low Loss Hydrocarbon Laminate & Prepreg Flame Rating: 94 V-0
IPC-4103A/560	fastRise FR-TC	4.80	Hydrocarbon/Alumina/Non-Reinforced

IPC-4203B Slash Sheet Reference Guide

IPC Slash Sheet Number	Part Number	DK (nominal)	Description
IPC-4203B/26	fastRise FR-EZ-22p fastRise FR-EZ-33p	2.44 2.51	PTFE/Ceramic/Adhesive

