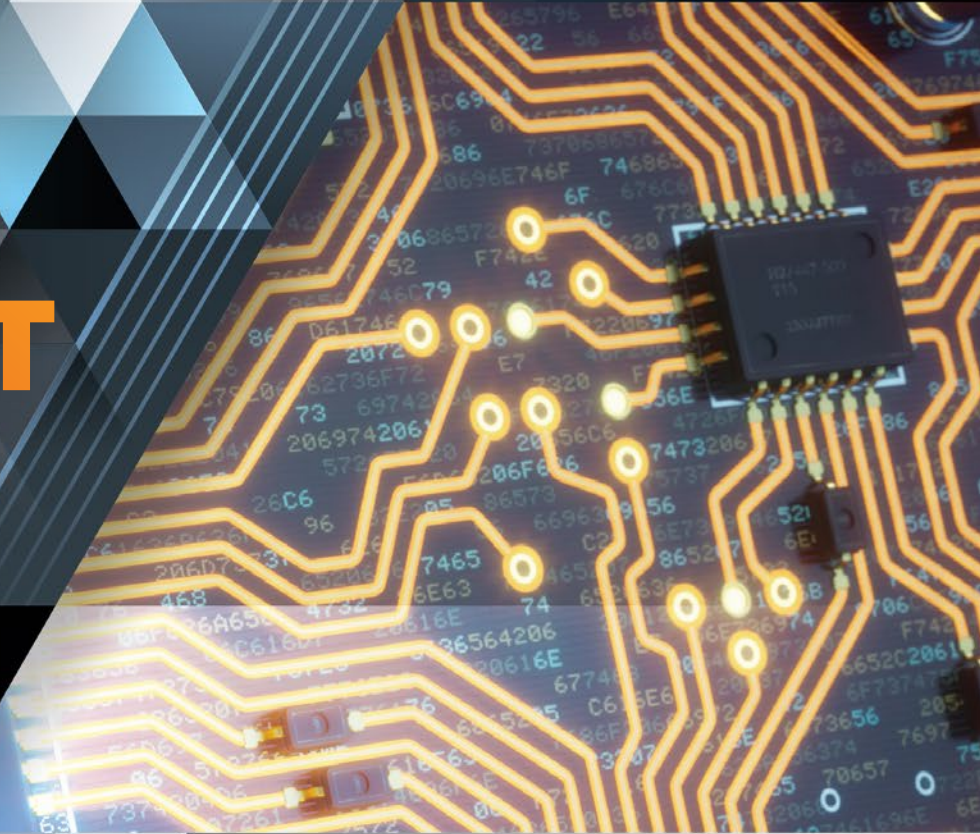


**isola**<sup>®</sup>  
THE BASE FOR INNOVATION<sup>™</sup>

# PRODUCT GUIDE



**High performance laminate  
and prepreg materials for  
PCB manufacturing.**



# LAMINATES & PREPREGS

## LEGACY

**IS410**  
Lead Free, High Tg Epoxy Laminate and Prepreg

**Tg:** 180°C **Dk:** 3.97  
**Td:** 350°C **Df:** 0.020

**DE104**  
Standard Tg Laminate and Prepreg

**Tg:** 135°C **Dk:** 4.37  
**Td:** 315°C **Df:** 0.022

**IS680**  
Very Low Loss Material

**Tg:** 200°C **Dk:** 2.80-3.45  
**Td:** 360°C **Df:** 0.0025-0.0035

**185HR**  
Standard Loss, Thermally Robust Epoxy Laminate and Prepreg

**Tg:** 180°C **Dk:** 4.01  
**Td:** 340°C **Df:** 0.020

**IS400**  
Lead Free, Mid Tg Epoxy Laminate and Prepreg

**Tg:** 150°C **Dk:** 3.90  
**Td:** 330°C **Df:** 0.022

## NO FLOW

**FR406N**  
No-Flo® and Lo-Flo® Specialty Prepreg

**Tg:** 170°C **Dk:** 4.3  
**Td:** 300°C **Df:** 0.025

**P25N**  
Polyimide UL HB No Flow Prepreg

**Tg:** 250°C **Dk:** 3.67  
**Td:** 383°C **Df:** 0.018

**IS680AG**  
Very Low Loss Material

**Tg:** 200°C **Dk:** 3.00/3.38/3.45/3.48  
**Td:** 360°C **Df:** 0.0020 - 0.0029

**IS550H**  
Low CTE, Very High Thermal Reliability Laminate and Prepreg

**Tg:** 200°C **Dk:** 4.43  
**Td:** 400°C **Df:** 0.016

**370HR**  
Standard Loss, Thermally Robust Epoxy Laminate and Prepreg

**Tg:** 180°C **Dk:** 4.04  
**Td:** 340°C **Df:** 0.021

## HIGH TEMPERATURE

**P95/P25**  
Polyimide UL HB Laminate and Prepreg

**Tg:** 260°C **Dk:** 3.76  
**Td:** 416°C **Df:** 0.017

**P96/26**  
Polyimide UL V-0 Laminate and Prepreg

**Tg:** 260°C **Dk:** 3.76  
**Td:** 396°C **Df:** 0.017

**TERRAGREEN® (RF/MW)**  
Very Low Loss Material

**Tg:** 200°C **Dk:** 3.45  
**Td:** 390°C **Df:** 0.0032

**I-SPEED®**  
Low Loss, Epoxy Laminate and Prepreg

**Tg:** 180°C **Dk:** 3.64  
**Td:** 360°C **Df:** 0.0060

**FR408HR**  
Lead Free, Mid Loss Laminate and Prepreg

**Tg:** 190°C **Dk:** 3.68  
**Td:** 360°C **Df:** 0.0092

**I-TERA® MT40 (RF/MW)**  
Very Low Loss Material

**Tg:** 215°C **Dk:** 3.38/3.45/3.60/3.75  
**Td:** 360°C **Df:** 0.0028 - 0.0035

**I-TERA® MT40**  
Very Low Loss Laminate and Prepreg

**Tg:** 215°C **Dk:** 3.45  
**Td:** 360°C **Df:** 0.0031

**TERRAGREEN®**  
Very Low Loss Laminate and Prepreg

**Tg:** 200°C **Dk:** 3.44  
**Td:** 390°C **Df:** 0.0039

**ASTRA® MT77**  
Ultra Low Loss, RF/MW Laminate and Prepreg

**Tg:** 200°C **Dk:** 3.00  
**Td:** 360°C **Df:** 0.0017

**TACHYON® 100G**  
Very Low Loss Laminate and Prepreg

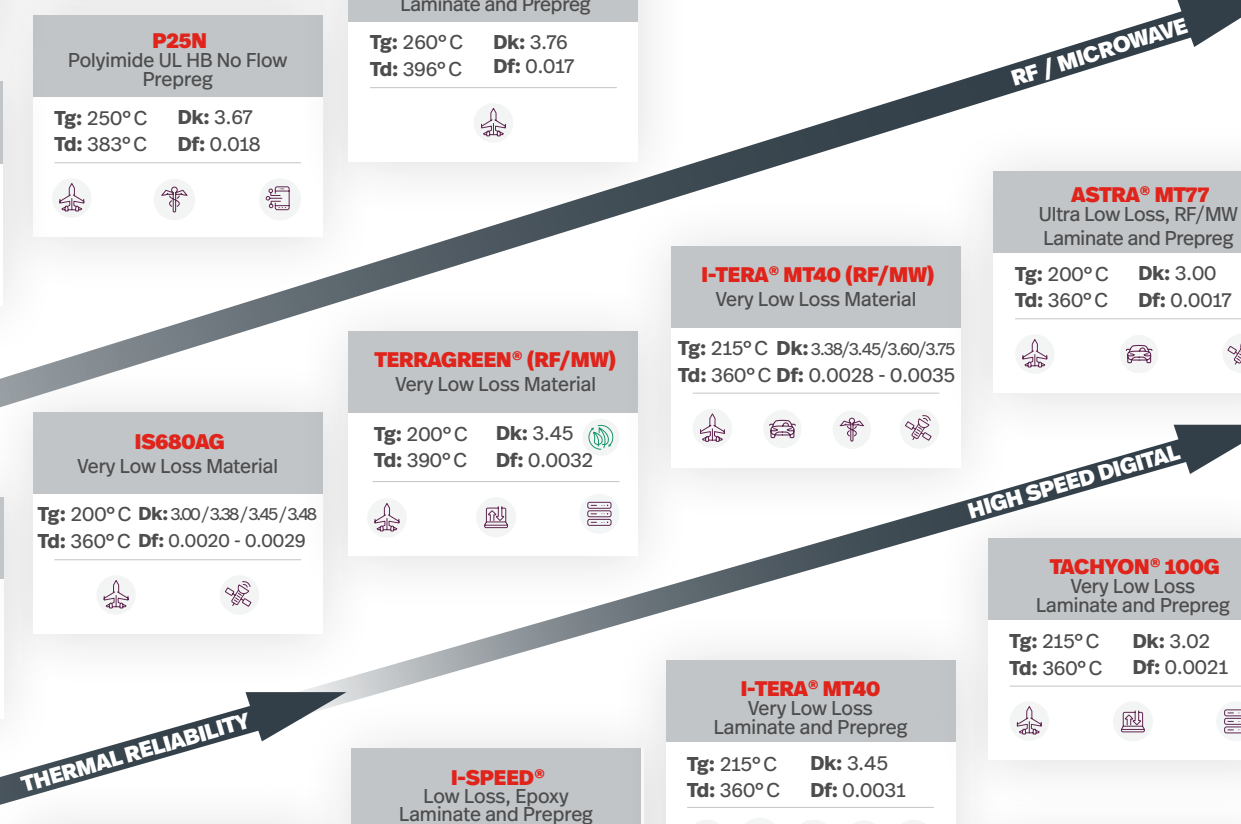
**Tg:** 215°C **Dk:** 3.02  
**Td:** 360°C **Df:** 0.0021

**TERRAGREEN® 400G**  
Extremely Low Loss Laminate and Prepreg

**Tg:** 210°C **Dk:** 3.05  
**Td:** 400°C **Df:** 0.0018

## ATTRIBUTES

	HALOGEN FREE	Tg	Td	T-260	T-288	Dk		Df		TYPICAL PEEL STRENGTHS /	MOISURE ABSORPTION	UL	CTI
		°C	°C	min	min	2GHz	10GHz	2GHz	10GHz				
RF/MICROWAVE	IS680	200	360	≥60	≥60	2.80 to 3.45	2.80 to 3.45	0.0025 to 0.0035	0.0025 to 0.0035	4.01	0.100%	110	2
	IS680 AG	200	360	≥60	≥60	3.00 to 3.45	3.00 to 3.45	0.0020 to 0.0029	0.0020 to 0.0029	4.01	0.100%	110	2
	I-TERA® MT40 (RF/MW)	215	360	≥60	≥60	3.38 to 3.75	3.38 to 3.75	0.0028 to 0.0035	0.0028 to 0.0035	4.00	0.100%	130	3
	TERRAGREEN® (RF/MW)	200	390	≥60	≥60	3.45	3.45	0.0032	0.0032	4.00	0.050%	130	2
	ASTRA® MT77	200	360	≥60	≥60	3.00	3.00	0.0017	0.0017	5.70	0.100%	130	3
HIGH SPEED DIGITAL	IS415	200	370	60	>20	3.72	3.71	0.0120	0.0125	7.00	0.150%	130	1
	FR408HR	190	360	≥60	>30	3.68	3.65	0.0092	0.0095	5.50	0.061%	130	2
	I-SPEED®	180	360	>60	≥60	3.64	3.63	0.0060	0.0071	5.50	0.061%	130	2
	TERRAGREEN®	200	390	≥60	≥60	3.44	3.44	0.0039	0.0039	4.00	0.050%	130	2
	I-TERA® MT40	215	360	≥60	≥60	3.45	3.45	0.0031	0.0031	4.00	0.100%	130	3
	TACHYON® 100G	215	360	≥60	≥60	3.04	3.02	0.0021	0.0021	4.50	0.100%	130	3
THERMAL RELIABLE	TERRAGREEN® 400G	210	400	≥60	≥60	3.05	3.05	0.0018	0.0018	3.50	0.050%	130	2
	IS400	150	330	>60	>10	3.90	3.80	0.0210	0.0260	9.00	0.180%	130	3
	185HR	180	340	60	>15	4.01	3.88	0.0200	0.0236	5.90	0.150%	130	3
	370HR	180	340	60	≥30	4.04	3.92	0.0210	0.0250	7.00	0.150%	130	3
	IS550H	200	400	>60	>60	4.50	4.43	0.014	0.0160	8.20	0.250%	150	3
SPECIALTY PRODUCTS	P95/P25	260	416	≥60	≥60	3.76	3.73	0.0179	0.0210	7.00	0.500%	140	2
	P96/P26	260	396	≥60	≥60	3.76	3.73	0.0179	0.0210	7.00	0.500%	140	4



### ACCORDING TO IPC-4101

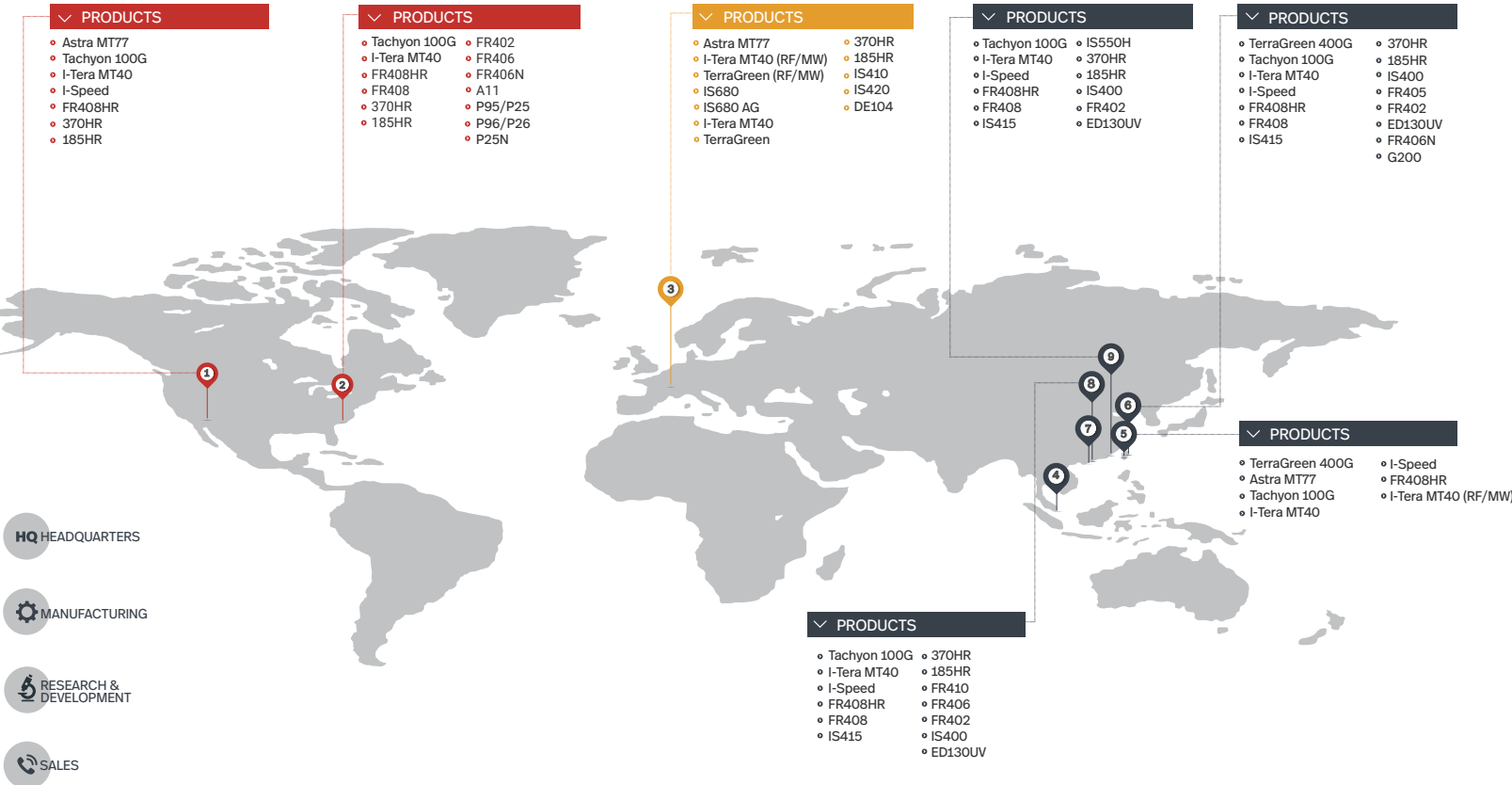
	/40	/41	/97	/98	/99	/101	/102	/126	/129	/134	/140
THERMAL RELIABLE	IS400			●	●	●					
	185HR				●	●		●			
	370HR				●	●		●			
	IS550H										●
HIGH SPEED DIGITAL	IS415			●	●	●		●			
	FR408HR				●	●		●			
	I-SPEED®				●	●		●			
	I-TERA® MT40							●			
	TACHYON® 100G							●			
TERRAGREEN® 400G										●	
SPECIALTY PRODUCTS	P95/P25	●	●								
	P96/P26	●	●								

### ACCORDING TO IPC-4103

	/17	
HIGH SPEED DIGITAL	TERRAGREEN®	●
	I-TERA® MT40	●
	TACHYON® 100G	●
RF/MICROWAVE	IS680	●
	IS680 AG	●
	TERRAGREEN® (RF/MW)	●
	I-TERA® MT40 (RF/MW)	●
	ASTRA® MT77	●

Isola high-performance laminate products feature proprietary resin formulations that are engineered to meet your design specifications and exceed your expectations.

# > GLOBAL LOCATIONS



- HQ HEADQUARTERS
- MANUFACTURING
- RESEARCH & DEVELOPMENT
- SALES

<p><b>NORTH AMERICA</b></p> <p>1. Chandler, AZ </p> <p>2. Ridgeway, SC </p>	<p><b>EUROPE</b></p> <p>3. Düren, DE </p>	<p><b>ASIA</b></p> <p>4. Singapore </p> <p>5. Yangmei, TW </p> <p>6. Taoyuan City, TW </p> <p>7. Hong Kong </p> <p>8. Huizhou, CH </p> <p>9. Suzhou, CH </p>
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## North American Global Headquarters

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Chandler, AZ 85226

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[amer.customer.service@isola-group.com](mailto:amer.customer.service@isola-group.com)

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49-2421-8080

[emea.customer.service@isola-group.com](mailto:emea.customer.service@isola-group.com)

## Asia Pacific Regional Headquarters

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