

3M™ High-Temperature Tapes
Product Selection Guide



3M™ Greenback Printed Circuit Board Tape 851, Green



3M™ Circuit Plating Tape 1280, Red



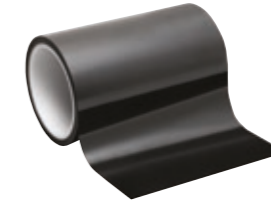
3M™ Polyimide Film Tape 5413, Amber



3M™ Low-Static Polyimide Film Tape 5419, Gold



3M™ Lined Low-Static Polyimide Film Tape 5433, Amber



3M™ Polyimide Film Tape 7412B, Black



3M™ Low-Static Polyimide Film Tape 7419, Amber

Performance Features	Low Stretch, No Adhesive Residue	Halogen Free, Low Stretch, No Adhesive Residue	Chemical Resistant, Flame Retardant (UL510FR), Halogen Free, No Adhesive Residue, Radiation Resistant	Chemical Resistant, Die-Cut Capability, Flame Retardant (UL510FR), Halogen Free, No Adhesive Residue, Radiation Resistant, Lined	Chemical Resistant, Die-Cut Capability, Flame Retardant (UL510FR), Halogen Free, No Adhesive Residue, Radiation Resistant, Lined	Chemical Resistant, Die Cut Capability, Flame Retardant (UL510FR), Halogen Free, High Electric Insulation, No Adhesive Residue, UV Shielding	Chemical Resistant, No Adhesive Residue
Description	3M™ Circuit Plating Tape 851 with polyester film and blended silicone and rubber adhesive used for PCB masking and other high-temperature applications. Green, 4.0 mil thick.	3M™ Circuit Plating Tape 1280 with polyester film used for PCB masking tape or other high-temperature applications. Red, 3.6 mil thick.	3M™ Polyimide Film Tape 5413 with DuPont™ Kapton® polyimide film and silicone adhesive used for PCB solder masking and other high-temperature applications. Amber, 2.7 mil thick.	3M™ Low-Static Polyimide Film Tape 5419 with DuPont™ Kapton® polyimide film and silicone adhesive used for PCB solder masking and other high-temperature applications. Low-static. Gold, 2.7 mil thick.	3M™ Lined, Low-Static Polyimide Film Tape 5433 with DuPont™ Kapton® polyimide film and silicone adhesive used for PCB solder masking and other high-temperature applications. Low static. Amber, 2.7 mil thick.	3M™ Non-Silicone Polyimide Film Tape 7412B with polyimide film and acrylic adhesive used for PCB solder masking and other high-temperature applications, insulation and surface anti-scratch. Black, 3.2 mil thick.	3M™ Low-Static, Non-Silicone Polyimide Film Tape 7419 with DuPont™ Kapton® polyimide film and acrylic adhesive is used for PCB solder masking and other high-temperature applications. Amber, 1.81 mil thick.
Product Part Number	851	1280	5413	5419	5433	7412B	7419
Product Form	Roll	Roll	Roll	Roll	Roll	Roll	Roll
Typical Application	Circuit Plating	Circuit Plating	Solder Masking	Solder Masking	Solder Masking	Solder Masking and Insulating	Solder Masking
Color	Green	Red	Amber	Gold	Amber	Black	Amber
Adhesive	Silicone/Rubber Blend	Silicone/Rubber Blend	Silicone	Silicone	Silicone	Acrylic	Acrylic
Backing	Polyester (PET)	Polyester (PET)	Polyimide	Polyimide	Polyimide	Polyimide	Polyimide
Primary Liner	None	None	None	None	Polyester (PET)	Polyester (PET)	None
Standard Roll Size	144 Linear Yards	72 Linear Yards	36 Linear Yards	36 Linear Yards	36 Linear Yards	109 Linear Yards	36 Linear Yards
Standard Roll Size (metric)	132 Meters	65 Meters	33 Meters	33 Meters	33 Meters	100 Meters	33 Meters
Temp Range (°Celsius)	-40°C to 155°C	-40°C to 155°C	-73°C to 260°C	-73°C to 260°C	-73°C to 260°C	-40°C to 155°C	-40°C to 155°C
Temp Range (°Fahrenheit)	-40°F to 311°F	-40°F to 311°F	-100°F to 500°F	-100°F to 500°F	-100°F to 500°F	-40°F to 311°F	-40°F to 311°F
Adhesion to Stainless (oz/in)	29 oz/in	30 oz/in	20 oz/in	20 oz/in	20 oz/in	45 oz/in	4 oz/in
Adhesion to Stainless (metric)	0.8 kg/25.4 mm 3.3 N/cm	0.9 kg/25.4 mm 3.4 N/cm	0.6 kg/25.4 mm 2.2 N/cm	0.6 kg/25.4 mm 2.2 N/cm	0.6 kg/25.4 mm 2.2 N/cm	1.3 kg/25.4 mm 4.9 N/cm	0.11 kg/25.4 mm 0.5 N/cm
Tensile Strength at Break	27 lb/in	30 lb/in	33 lb/in	33 lb/in	33 lb/in	38 lb/in	33 lb/in
Tensile Strength at Break (metric)	490 N/100 mm	545 N/100 mm	599 N/100 mm	599 N/100 mm	599 N/100 mm	680 N/100 mm	599 N/100 mm
Total Tape Thickness without Liner	3.6 mil	3.6 mil	2.7 mil	2.7 mil	2.7 mil	3.2 mil	1.81 mil
Total Tape Thickness without Liner (metric)	0.09 mm	0.09 mm	0.07 mm	0.07 mm	0.07 mm	0.08 mm	0.046 mm
Total Thickness	3.6 mil	3.6 mil	2.7 mil	2.7 mil	2.7 mil	3.2 mil	1.81 mil
Total Thickness (metric)	0.09 mm	0.09 mm	0.07 mm	0.07 mm	0.07 mm	0.08 mm	0.046 mm

Regulatory: For regulatory information about this product, contact your 3M representative.

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