



Permacel®
A NITTO DENKO COMPANY

**Permacel® pressure sensitive tapes
featuring DuPont™ Kapton® polyimide films**

APPLICATIONS

**ELECTRICAL INSULATION
ELECTRONIC ASSEMBLY
WAVE & RE-FLOW SOLDER
LI-BATTERY
ALTERNATIVE ENERGY
SPUTTERING**

**P-221
P-222
P-223
P-224**

**HIGH
TEMPERATURE
INSULATION
AND MASKING**

PRODUCT	Description	Adhesive System	Dielectric Strength	UL Temp. Class (°C)	Flame Retardant	Features & Benefits
P-221	1-mil Kapton® Film (Amber)	Silicone	7.0 kV	180°C	Yes (UL-510)	The ultimate in electrical insulation tape. Thin and highly conformable, with outstanding puncture and tear resistance.
P-222	2-mil Kapton® Film (Amber)	Silicone	13.0 kV	180°C	Yes (UL-510)	For heavy-duty, high temperature applications where 1-mil film does not provide adequate strength or protection.
P-223	1-mil Double Coated Kapton® Film (Amber)	Silicone	8.5 kV	180°C	Yes (UL-510)	Provides outstanding thermal endurance and tensile strength at elevated use temperatures. Ideal for die-cutting. Outstanding tape for splices of insulation layers.
P-224	1-mil Kapton® Film (Amber)	Acrylic	7.0 kV	155°C	Yes (UL-510)	High thermal rating and high dielectric strength with excellent solvent resistance. A thin, highly conformable tape.

MILITARY SPECIFICATION	TYPE	PRODUCTS
MIL-E-5272	Sec. 4.8	P-221, P-222, P-223, P-224
MIL-P-46112B	Type 1	P-221, P-222, P-223, P-224 (FILM ONLY)
MIS-31631A	Type 11	P-222
MIL-T-47325		P-221

PERMACEL®

YOUR SOLUTION FOR HIGH PERFORMANCE PRESSURE SENSITIVE NEEDS.

- Durable → Superior Tensile Strength
- Good Elongation → Good Chemical Stability
- UL listed → High Dielectric Strength
- Excellent Flame Retardant Properties

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PERMACEL® PRESSURE SENSITIVE TAPE THE FIRST NAME IN TAPE.

FEATURING DUPONT™ KAPTON® POLYIMIDE FILMS