



HIGH TEMPERATURE TAPES

Technical Bulletin A10

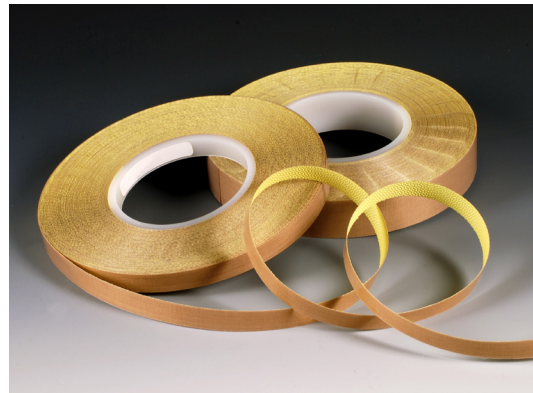
Pyro-Tape™ 682 is a family of high temperature, high performance tapes used in a wide range of industrial applications for plasma spray masking, heat reflectivity and abrasion, chemical, and electrical resistance. Pyro-Tape™ products are available in rolls up to 1" wide as well as custom widths and preformed shapes.

PRODUCT APPLICATIONS FEATURES

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|---------------|-----------------------|--|
| 682-CR | Chemical Resistance | <ul style="list-style-type: none"> Teflon (DuPont registered) coated fiberglass tape. Chemical resistance of Teflon for corrosive environments. Non-stick covering for heat seal bars and rubber molds used in the fabrication of composites. |
| 682-DS | Double Sided | <ul style="list-style-type: none"> Assembly of high temp components and films. |
| 682-ER | Electrical Resistance | <ul style="list-style-type: none"> Electrical insulation for process instrumentation, wiring and harnesses. RF induction coil insulation. Transformer, terminal and connector insulation. Masking gold fingers for printed circuit board wave soldering. |
| 682-HR | Heat Reflection | <ul style="list-style-type: none"> Protective wrap for pipes exposed to high heat. Heat mask for process instrumentation. Protective wrap for chutes, rails and slides. |
| 682-PM | Plasma Spray Masking | <ul style="list-style-type: none"> Multi-ply construction replaces single-ply tapes permitting significant reduction in masking time. Shadow mask tape for HVOF (high velocity oxy-fuel) spraying. |



Pyro-Tape™ 682-HR Heat Reflective Tape



Pyro-Tape™ 682-CR Chemically Resistant Tape

PYRO-TAPE™ 682 PRODUCT SPECIFICATIONS

Product Number	Tape Description	Total Tape Cross-Section in/mm	Temp ¹ °F (°C)	Adhesion Value oz/in	Tape Tensile Strength lbs/in	Volume Resistivity ² ohm-cm	Dielectric Strength volts/mil	Dielectric Constant
682-CR	Single layer, Teflon-coated fiberglass with high strength silicone adhesive	0.009 / 0.228	-100 / +500 (-73 / +260)	50	120	NA	6,000	NA
682-DS	Double-sided, single layer, fiberglass tape with silicone adhesive	0.007 / 0.018	-100 / +500 (-73 / +260)	25	175	NA	NA	NA
682-ER	Single layer polyimide film with silicone adhesive	0.0025 / 0.063	-100 / +500 (-73 / +260)	20	30	1.5 x 10 ¹⁷	7,000	3.4
682-HR	Bi-layer aluminum-fiberglass with silicone adhesive	0.077 / 0.177	-100 / +500 (-73 / +260)	40	150	NA	NA	NA
682-PM	Tri-layer silicone rubber-aluminum foil-fiberglass with silicone adhesive	0.019 / 0.480	-100 / +500 (-73 / +260)	40	130	NA	NA	NA

Reference Notes

¹ For plasma spray work, tapes will withstand flash temperatures far in excess of maximum operating temperatures.

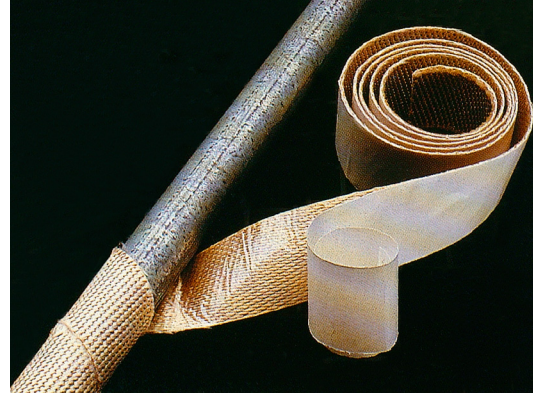
² Volume resistivity is for film only. No data for film with adhesive backing.





PYRO-TAPE™ 682-TB THERMAL BARRIER CERAMIC TAPE

The new 682-TB tape is a woven silica fabric tape with temperature resistance as high as 2500 °F used to offer thermal insulation for pipes. The Pyro-Tape™ 682-TB has an adhesive backing which is used to ease wrapping around pipes. The adhesive will burn off at 275 °F, and then the tape is secured to the pipe in intervals with stainless steel wire.



Pyro-Tape™ 682-TB Heat Barrier Tape

PRODUCT SPECIFICATIONS

Product	Tape Thickness	Tape Width	Thermal Conductivity ¹ BTU-in/hr-ft ² -°F	Silica Content	Roll Length
682-TB1-1	0.030" / 0.76mm	1"	1.0	> 96%	150'
682-TB1-2	0.030" / 0.76mm	2"	1.0	> 96%	150'
682-TB1-4	0.030" / 0.76mm	4"	1.0	> 96%	150'
682-TB2-1	0.054" / 1.37mm	1"	1.1	> 96%	75'
682-TB2-2	0.054" / 1.37mm	2"	1.1	> 96%	75'
682-TB2-4	0.054" / 1.37mm	4"	1.1	> 96%	75'

Reference Notes

¹ Measured at an average temperature of 600 °F.

