DATA SHEET

Member of CISQ Federation
CERTIFIED MANAGEMENT SYSTEM
ISO 9001

HALOGEN FREE HEAT SHRINK TUBING
THIN WALL NON-ADHESIVE

TACSA hot shrink tubes are made of polyolefin modified by radiation cross-linking. They are malleable and flexible; they present excellent insulation, heat resistance and voltage performance. They are halogen free and comply with RoHS, REACH and SONY environmental standards. They comply with the flammability classification UL224 VW-1, they are flame retardant, resistant to wear, UV radiation, oils, lubricants, and present high dielectric stiffness.

Specifications and presentation

Feature	Standard	Unit	Typical value
Shrinking temperature	NI	°C	120-150
Radial shrinking	NI	%	≥ 50
Longitudinal shrinking	ASTM D 2671	%	± 5
Tensile strength	ASTM D 638	MPa	≥10.4
Elongation at break	ASTM D 638	%	≥200
Tensile strength after aged (158° C for 7 days)	ASTM D 638	MPa	≥ 7.3
Elongation at break after aged (158° C for 7 days)	ASTM D 638	%	≥ 100
Resistance of dielectric tension	UL 224	V	600
Volumetric resistivity	ASTM D 2671	Ω/cm	10^{14}
Dielectric stiffness	UL 224	kV/mm	≥ 15
Flammability	UL 224	VW-1 – Flame retardant	
Concentricity	ASTM D 2671	%	
Thermal shock (4h to 250° C)	UL 224	No cracks	
Cold curve (1h to -30° C)	UL 224	No cracks	
Working temperature	-	°C	-55 ° a 125
Colors	Black, White, Blue, Red, Yellow, Brown, Green/Yellow.		

Presentation	Dimensions	Packing	Colors
Split	From 3/64" to 4"	Coils from 20m to 200m	Black, White, Blue, Red, Yellow, Brown, Green/Yellow
Coils of 10m	From 3/32" to 1/2"	Box x 8 coils	Black

Applications

•Used in construction, automotive, electronics, public utilities industries, etc. It provides solutions for:
•Insulation and covering of cables for low tension uses.
•Identification and assembly of cable harness.
•Tension release in cable terminations and connections to connectors.
•Insulation and protection against communication conductors exposed to open sky.

Instructions for use

Apply heat uniformly all over the tube circumference; hot air gun usage is recommended.
Select a hot shrink tube which non-shrink diameter is approximately twice the conductor's to be connected.

Standards

UL AR- IEC 60684 - 3 - 209 Certificate
It complies with RoHS (Restriction of Hazardous Substances), REACH and SONY "Green Partner" environmental standards.

Warranty

TACSA warrants this product for three (3) years of storage in its original package. Do not store at temperatures above 35° C. Do not expose to solar radiation.

Heat shrink/Conductor Ratio

Heat shrink tubes recommended for unipolar conductors.

Cross-sectional area of copper conductor (m)	Approx. external diameter of the conductor (mm)	Diameter of non-shrink tube (mm)	Heat shrink recommended
de 0,75 a 1,5	de 2,4 a 3	3,2	1/8"
de 2 a 4	de 3,3 a 4,2	4,8	3/16"
de 6 a 10	de 4,8 a 6,1	6,4	1/4"
16	7,9	9,5	3/8"

Heat shrink recommended for bipolar conductors.

Cross-sectional area of copper conductor (mm)	Approx. external diameter of conductor (mm)	Diameter of non-shrink tube (mm)	Heat shrink recommended
de 0,5 a 1,5	de 4,8 a 6	6,4	1/4"
de 1,5 a 2	de 6,6 a 7,5	7,9	5/16"
2,5	8	9,5	3/8"

The provided information is based on experimental results under controlled temperature and humidity conditions, and its repetitiveness depends on external conditions, application methods and tools used. TACSA shall not be held liable for any loss, injury, damage or detriment resulting from an incorrect handling or misuse of the product. Its suitability shall be previously determined for the intended purpose.