



Changyuan Electronics (Dongguan) Co., Ltd.

Product Specification

Product Name	Heat Shrink Anti-tracking Rain Shed	Supplier Code	
Specification	All Specifications	Customer Code	

Drafted/Date	Verified/Date
Wei Wei/June 1, 2020	Hu Jun/ June 1, 2020

Customer Approval

Customer Approval /Date		
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1. Scope

This approval specifies technical requirement, package, storage and specification of the heat shrink anti-tracking rain sheds.

2. Standards

ASTM-D-638 (GB/T 1040)

Standard test methods for tensile properties of plastics

IEC 60243 (GB/T 1408)

Electrical strength of insulating materials-Test methods

IEC 60093 (GB/T 1410)

Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials

ISO 974 (GB/T 5470)

Plastics-Determination of the brittleness temperature by impact

ASTM-D-5510 (GB/T 7141)

Plastics-Methods of heat aging

IEC 60250 (GB/T 1409)

Recommended methods for the determination of the permittivity and dielectric dissipation factor of electric insulating materials at power, audio and radio frequencies including metre wavelengths

ISO 868(GB/T 2411)

Plastics and ebonite-Determination of indentation hardness by means of a durometer (Shore hardness)

ISO 62(GB/T 1034)

Plastics-Determination of water absorption

IEC 60587(GB-T 6553)

Electrical insulating materials used under severe ambient conditions-Test methods for evaluating resistance to tracking and erosion

3. Technical requirements

3.1 Product properties

CYG heat shrink anti-tracking rain sheds are made of cross-linked polyolefin coated with anti-tracking adhesive.

Standard color: Red.

3.2 Appearance

The surface of the heat shrink anti-tracking rain sheds should be smooth and clean, and free of pinholes or cracks visible to the unaided eye.

3.3 Heat shrink properties

Start to shrink at 90°C, and fully recovered at 130°C

Radial shrink ratio: $\geq 50\%$
 Wall thickness non-uniformity: $\leq 35\%$.

3.4 Physical and chemical properties: See Table 1.

3.5 Product specification: See Table 2.

4. Package, Transportation and Storage

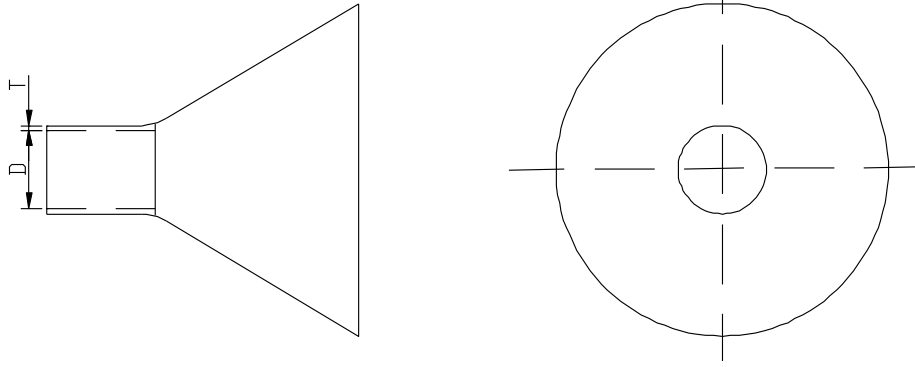
4.1 Products can be packed according to customer's requirement.

4.2 These products are non-hazardous. Keep in clean, cool, dry, well-ventilated storage area. During transportation and storage, pay attention to rain and sun and keep away from sources of ignition.

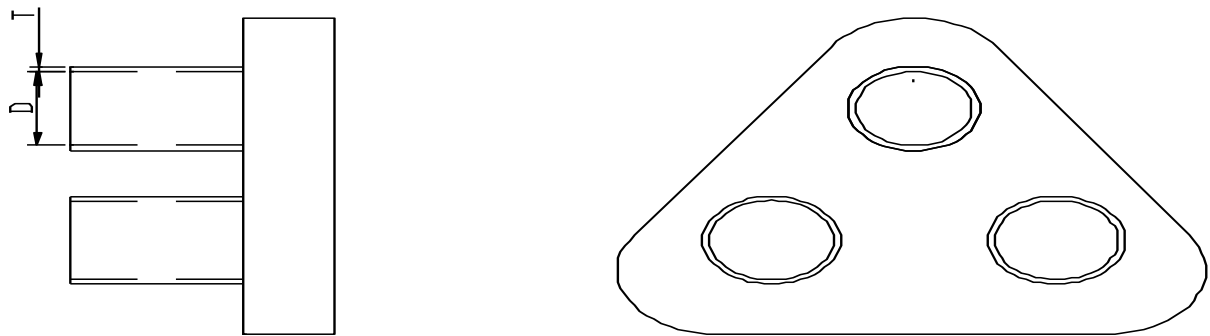
Table 1. Technical Data

Property	Test Method	Standard Value
Tensile Strength	ASTM-D-638	$\geq 8\text{MPa}$
Elongation at Break	ASTM-D-638	$\geq 300\%$
Tensile Strength Variation After Heat Aging (130°C × 168h)	ASTM-D-5510	$\leq \pm 30\%$
Elongation at Break Variation After Heat Aging (130°C × 168h)	ASTM-D-5510	$\leq \pm 30\%$
Volume Resistivity	IEC 60093	$\geq 1 \times 10^{14} \Omega \cdot \text{cm}$
Dielectric Strength	IEC 60243	$\geq 20\text{kV/mm}$
Tracking Resistance	IEC 60587	1A3.5
Dielectric Constant	IEC 60250	≤ 5
Heat Shock	160°C, 4h	No Crack
Water Absorption (23±2) °C 24h	ISO 62	$\leq 0.1\%$
Hardness (Shore A)	ISO 868	≥ 80
Brittle Temperature	ISO 974	-40°C

Table 2. Product Specification



Spec.	As Supplied/mm		After Recovered/mm	
	Inner Diameter (D) (± 5)	Wall Thickness (T) ($\pm 20\%$)	Inner Diameter (D) Max	Wall Thickness (T) ($\pm 10\%$)
1-Core $\Phi 35$	35	1.9	17	2.7
1-Core $\Phi 40$	40	1.9	24	2.7
1-Core $\Phi 50$	50	1.9	24	2.7
1-Core $\Phi 60$	60	2.4	32	4.0
1-Core $\Phi 70$	70	2.4	32	4.0



Spec.	As Supplied/mm		After Recovered/mm	
	Inner Diameter (D) (± 5)	Wall Thickness (T) ($\pm 20\%$)	Inner Diameter (D) Max	Wall Thickness (T) ($\pm 10\%$)
3-Cores $\Phi 35$	35	1.1	16	2.7
3-Cores $\Phi 45$	45	1.1	22	3.0
3-Cores $\Phi 50$	50	1.1	22	3.0