

SCT

Adhesive-lined, semirigid, polyolefin heat-shrinkable tubing (extended temperature range)

SCT is a high-quality, dual-wall tubing designed to insulate and seal automotive wire splices and components made by ultrasonic welding, clip-and-dip, or soldering. Typical applications are insulating and sealing splices in an under-the-hood automotive environment.

SCT has a tough outer wall made of radiation crosslinked, flame-retardant, semirigid polyolefin. The inner wall is a unique, specially formulated hot-melt adhesive designed to function at an extended temperature range. The adhesive forms an outstanding barrier against moisture and automotive fluids.

This barrier provides exceptional protection against corrosion.

Because SCT has a high shrink ratio, only a few sizes are needed to cover a wide range of splice and component diameters.

Temperature rating

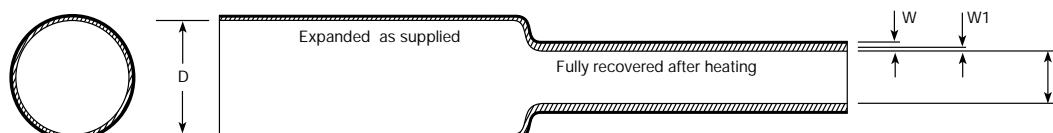
Full recovery temperature:	135°C
Continuous operating temperature:	-40°C to 150°C

Specifications*

Type	Raychem
SCT	SCT SCD

*When ordering, always specify latest issue.

Dimensions (millimeters/inches)



Size	Inside diameter		Recovered wall thickness**		Recovered wall thickness**		Recovered wall thickness**	
	D (min.)	d (max.)	W	W1 (min.)	W	W1 (min.)	W	W1 (min.)
	Expanded as supplied	Recovered after heating	Total wall	Adhesive wall	Total wall	Adhesive wall	Total wall	Adhesive wall
SCT No. 0	5.1 0.200	1.3 0.050	1.4 ± 0.30	0.76 0.030	1.4 ± 0.30	0.76 0.030	1.4 ± 0.30	0.76 0.030
SCT No. 1	7.6 0.300	1.7 0.065	1.52 ± 0.30	0.76 0.030	1.52 ± 0.30	0.76 0.030	1.52 ± 0.30	0.76 0.030
SCT No. 2	9.0 0.355	2.3 0.090	1.52 ± 0.30	0.76 0.030	1.52 ± 0.30	0.76 0.030	1.52 ± 0.30	0.76 0.030
SCT No. 3	11.6 0.455	2.5 0.100	2.29 ± 0.30	1.40 0.055	2.29 ± 0.30	1.40 0.055	2.29 ± 0.30	1.40 0.055
SCT No. 4	17.8 0.700	4.4 0.175	2.54 ± 0.30	1.52 0.060	2.54 ± 0.30	1.52 0.060	2.54 ± 0.30	1.52 0.060
SCT No. 5	27.9 1.100	8.4 0.330	2.54 ± 0.30	1.52 0.060	2.54 ± 0.30	1.52 0.060	2.54 ± 0.30	1.52 0.060

**Wall thickness will be less if tubing recovery is restricted during shrinkage.

Ordering information

Color	Black
Size selection	Always order the largest size that will shrink snugly over the component being covered.
Standard packaging	Cut pieces. See reverse for information on standard cut lengths.
Marking	Tubing will be marked with the number size (for example, SCT-0, SCT-1, SCT-2, SCT-3, SCT-4, SCT-5).
Ordering description	Specify product name, size, and color, and cut length; for example, SCT-No.2-0-50MM (0=Black).

Specification values

	Property	Unit	Requirement	Method of test
Physical	Dimensions	mm (<i>inches</i>)	See reverse	ASTM D 2671
	Longitudinal change	percent	+0, -10	ASTM D 2671
	Tensile strength	psi	1500 minimum	ASTM D 2671
	Ultimate elongation	percent	300 minimum	ASTM D 2671
	Secant modulus (as supplied)	psi	35,000 minimum	ASTM D 2671
	Concentricity (as supplied)	percent	60 minimum	ASTM D 2671
	Heat shock (4 hours at 250°C/482°F)		No cracking, dripping or flowing of jacket	ASTM D 2671
Electrical	Dielectric strength (jacket only)	volts/mil	500 minimum	ASTM D 149
	Volume resistivity	ohm-cm	10 ¹³ minimum	ASTM D 257
	Immersion leak resistance	microamps	0.25 maximum	See note below
	Thermal aging (1000 hours at 150°C/302°F) Followed by test for:			See note below
	Immersion leak resistance	microamps	0.25 maximum	
	Thermal cycling 25 cycles (-40°C to 135°C/-40°F to 225°F) Followed by test for:			See note below
	Immersion leak resistance	microamps	0.25 maximum	
Chemical	Fluid resistance (24 hours at 25°C/77°F) in: ASTM Reference Fuel C VV-F-800 Diesel Fuel (24 hours at 100°C/212°F) in: ASTM #3 Oil Followed by test for:			See note below
	Immersion leak resistance	microamps	0.25 maximum	

Note: Consult Raychem SCT SCD for specific details about test procedures.

Standard cut lengths

Part number	Standard cut length	Cut length tolerance
SCT No. 0	50 mm, 75 mm, 105 mm	± 1.5 mm
	1220 mm	± 25.4 mm
SCT No. 1	27 mm, 50 mm, 65 mm	± 1.5 mm
	1220 mm	± 25.4 mm
SCT No. 2	27 mm, 50 mm, 65 mm	± 1.5 mm
	1220 mm	± 25.4 mm
SCT No. 3	27 mm, 65 mm, 75 mm	± 1.5 mm
	1220 mm	± 25.4 mm
SCT No. 4	27 mm, 75 mm, 90 mm	± 1.5 mm
	1220 mm	± 25.4 mm
SCT No. 5	50 mm, 200 mm	± 1.5 mm
	1220 mm	± 25.4 mm

Users should independently evaluate the suitability of the product for their application.

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