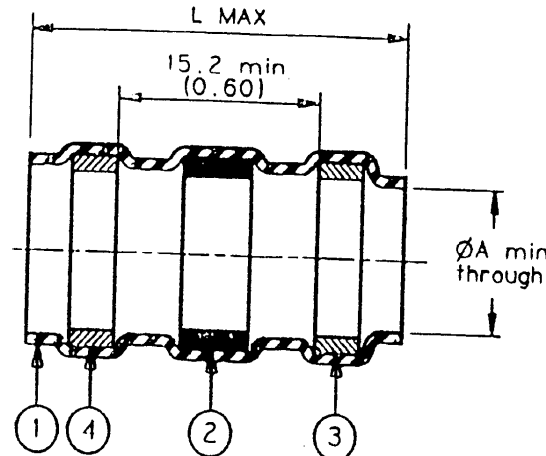


798-812 TO
897

SOLDERSLEEVE * ONE STEP * WIRE AND CABLE TERMINATOR -LOW TEMPERATURE-

SCALE: none



Product Revision	Product Name	Product dimensions		Cable dimensions		
		L MAX	A min	B MAX	C min	D min
CWT-3801	D	26 (1.025)	1.7 (0.065)	1.7 (0.065)	0.9 (0.035)	0.4 (0.015)
CWT-3802	C	26 (1.025)	1.95 (0.075)	1.95 (0.075)	1.1 (0.045)	0.6 (0.025)
CWT-3803	B	42.0 (1.655)	2.7 (0.105)	2.7 (0.105)	1.8 (0.070)	1.3 (0.050)
CWT-3805	A	42.0 (1.655)	4.5 (0.180)	4.5 (0.180)	2.3 (0.090)	1.8 (0.070)
CWT-3806	B	41.4 (1.630)	6.0 (0.235)	6.0 (0.235)	3.3 (0.130)	2.8 (0.110)
CWT-3807	A	42.0 (1.655)	7.0 (0.275)	7.0 (0.275)	3.7 (0.145)	3.2 (0.125)
CWT-3809	B	42.0 (1.655)	8.7 (0.340)	8.7 (0.340)	4.2 (0.165)	3.7 (0.145)
CWT-3811	C	41.0 (1.615)	10.7 (0.420)	10.7 (0.420)	7.1 (0.280)	6.6 (0.260)
CWT-3813	B	42.0 (1.655)	13.0 (0.510)	13.0 (0.510)	8.9 (0.350)	8.4 (0.330)

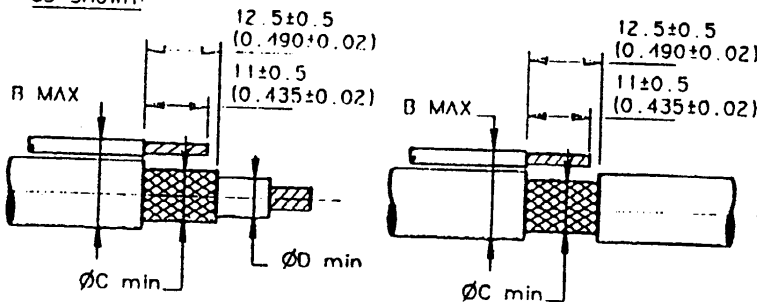
APPLICATION

These controlled soldering devices are designed for termination of a bare or tin plated copper shield on a cable having an insulation rated for at least +85°C.

Temperature range:
-55°C to +125°C.

For installation procedure and application equipment consult
RPIP-824-00 or H54286

For best results, prepare the cable as shown:



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS.
INCHES DIMENSIONS ARE BETWEEN BRACKETS.

TECHNICAL DETAILS

ITEM DESCRIPTION

- ① Heat-shrinkable insulation sleeve. Transparent clear.
- ② Solder preform with flux.
- ③ Meltable ring. (Colour: clear).
- ④ Meltable ring. (Colour: blue).

MATERIAL

Radiation cross-linked modified polyolefin.

Sn50PbCd18 solder alloy with activated rosin flux.

Thermally stabilized thermoplastic.

Thermally stabilized thermoplastic.

DRAWN BIMIE.

Technical service

APPROVED PASSA F.

Development

APPROVED CONVERS P.

Product Manager

APPROVED DAUVILLIERS B.

Quality Assurance

DCR NUMBER

DCR-D-95-621

CAD NAME

CAD NAME: G:\DVTS\SCD\CWT38XX

* A trademark of Raychem Corporation.

This drawing and the information set forth herein are the property of Raychem Corporation. Publication, duplication, disclosure, or use for any purpose, other than for the customer's direct needs for the application concerned, are prohibited. Raychem reserves the right to amend the drawing and the information set forth herein at any time. Raychem's obligations shall be only as set forth in Raychem's terms and conditions of sale for this product. Users should independently evaluate the suitability of the product for their application.

Coaxial Cable Termination

798-812 to 897

Raychem's SolderSleeve coaxial cable terminators allow reliable, easy terminations in a variety of coaxial cable applications, including printed circuit boards (PCBs). The insulating and strain relief capabilities of SolderSleeve terminators provide the ideal solution to centre conductor breakage problems.

Designed for applications with temperatures up to +150°C the products in this section include:

- CWT SolderSleeve terminators designed for low temperature cable with operating temperatures up to +125°C and where a cost effective solution is a must.
- SolderSleeve coaxial cable terminators, which allow reliable, economical attachment of coaxial cable to connector terminals, printed wiring assemblies, or solderless wrap terminals.
- One-piece SolderSleeve PCB coaxial cable terminators, which permit quick, easy and cost effective terminations of coaxial cable to printed circuit boards.

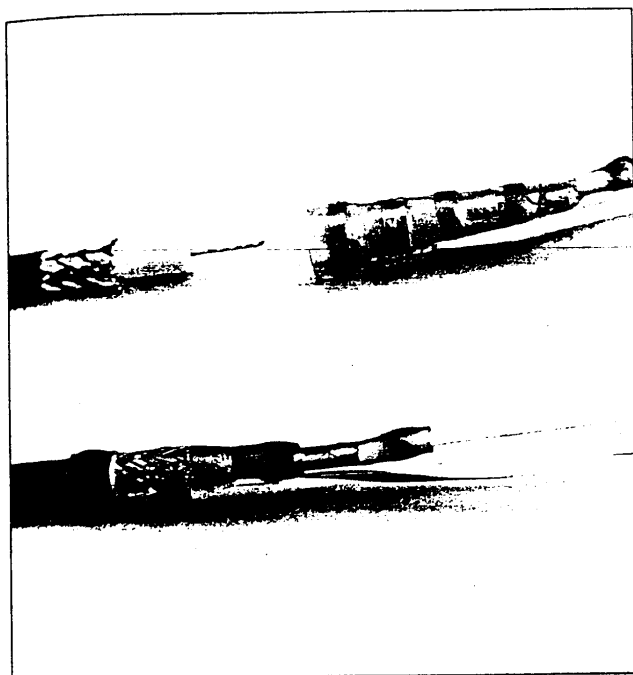
With precisely measured solder and flux, SolderSleeve products provide exact process control of terminations. The SolderSleeve method means strong connections with the lowest possible voltage drop. Small, lightweight SolderSleeve terminators are also the ideal solution for high density packaging problems.



Electrical Interconnect Devices

Heat Shrinkable

Simplified coaxial cable termination



Applications

Used for terminating coaxial cable to component terminals, contacts, printed circuit boards and solderless wrap terminals.

Features/Benefits

- Transparent Kynar or Polyolefin insulation sleeve provides encapsulation, inspectability, strain relief (eliminates centre conductor breakage) and insulation.
- Prefluxed solder preform provides controlled soldering process.
- One or two-piece design provides easy installation and lower installed cost.
- Preinstalled termination leads provide convenience and ease of installation.

Product Characteristics

Material

Insulation (D-181/B-02X/B-04X)	Radiation crosslinked, heat-shrinkable polyvinylidene fluoride (Kynar)
Insulation (CWT series)	Radiation crosslinked, heat-shrinkable polyolefin
Solder and flux (D-181/B-02X/B-04X)	Sn63 Pb37, RMA flux per QQ-S-571
Solder and flux (CWT series)	Sn50 Pb32 Cd18, RA flux
Leads	Available in a variety of standard colours, strandings and sizes (AWG30 - AWG20).

Typical performance

Voltage drop	2.0 mV
Tensile strength	Exceeds strength of conductor
Dielectric strength	2.0 kV
Temperature rating (CWT)	-55°C to +125°C
Temperature rating (D-181/B-02X/B-04X)	-55°C to +150°C
Insulation resistance	1000 megachms

Coax Terminator Product Options

Product series	Max cable operating temperature	Construction type	Raychem specification
CWT	+125°C	2-piece	Raychem D-5023
D-181	+150°C	2-piece	Raychem RB-106
B-02X/04X	+150°C	1-piece	Raychem RB-106

Installation

For proper installation of these devices the correct heating tool and reflector attachment must be used. Any one of the following Raychem heating tools is recommended:

- HL1802E
- AA-400 Super Heater
- IR-1759 Miniray
- CV-1981

You will find ordering information for these tools in the Tools and Accessories section of this catalogue.

Refer to Raychem installation procedure RCPS 200-36 (D181), RPIP-500-03 (B-02X/B-04X) or H54286/RPIP-824-00 (CWT) for detailed instructions.

Ordering Information

1. Select the product series (use Table A).
2. Select preinstalled lead type (use Table B).
3. Select appropriate part number by referring to tables C, D or E.

Table A: Series description

Product series	Found in table	Solder/flux	Continuous max temp	Use on cables rated	Cable shield plating
CWT	C	Sn50 RA	+125°C	+85°C - +125°C	Tin, copper
D-181	D	Sn63 RMA	+150°C	+125°C and above	Tin, silver
B-02X/04X	E	Sn63 RMA	+150°C	+125°C and above	Tin, silver

Table B: Preinstalled lead descriptions - dimensions in mm (inches)

Supplied with series	Type	Plating	Stranding	AWG	Length	Colour
CWT	XL Polyethylene	Tin	Stranded	22	150 (6)	White-W1, Green-W2
CWT	ETFE (Tefzel)	Silver	Solid	26	150 (6)	White-W4, Blue-W5
B-020, B-040/ B-044	55A0111 (MIL-W-22759/32)	Tin	Stranded	20-24	150 (6)	Blue (grnd), White (cntr)
D-181, B-021, B-041, B-043	M81822/13 (Solderless wrap)	Silver	Solid-OFHC	26 and 30	150 (6)	Blue (grnd), White (cntr)
D-181	Bus (PCB terminator)	Tin	Solid	22	25.4 (1)	None
D-181	55A0111 (Mil-W-22759/32)	Tin	Stranded	20-24	150 (6)	White/Black stripe (grnd), White (cntr)

Table C: CWT series for coaxial cable termination - dimensions in mm (inches)

Note: Terminating the cable shield and centre conductor requires two CWT series part numbers: one for the shield terminator and one for the centre conductor terminator.

1. Determine your cable RG number or dimensions.
2. Optional: Select preinstalled wire type (use Table B).
3. Select part number.

Cable RG number or dimensions in mm (inches)			Preinstalled lead options (see Table B for lead description)	
Typical RG number	Ctr. conductor dielectric OD	Shield term. jacket OD	None	With preinstalled lead *
174	Ctr. cond.		CWT-3803	CWT-3803-WX
	Shield		CWT-3805	CWT-3805-WX
122	Ctr. cond.		CWT-3803	CWT-3803-WX
58	Shield		CWT-3806	CWT-3806-WX
59	Ctr. cond.		CWT-3805	CWT-3805-WX
	Shield		CWT-3807	CWT-3807-WX
Various constructions	0.8 - 2.3 (.030 - .090)		CWT-3803	CWT-3803-WX
	2.0 - 2.8 (.080 - .110)		CWT-3803	CWT-3803-WX
	2.8 - 3.3 (.110 - .130)		CWT-3805	CST-3805-WX
		1.3 - 2.8 (.050 - 0.110)	CWT-3803	CWT-3803-WX
		2.5 - 4.4 (.100 - .175)	CWT-3805	CWT-3805-WX
		3.2 - 6.0 (.125 - .235)	CWT-3806	CWT-3806-WX

* "X" designates part number suffix for preinstalled wire lead type (see Table B).

Electrical Interconnect Devices

Table D: D-181 series - dimensions in mm (inches)

The D-181 series uses a two-piece design to terminate cable rated at +125°C minimum.

1. Determine your cable RG number or dimensions.
2. Optional: Select preinstalled wire type (use Table B).
3. Select part number.

Stranded wire products

Cable RG number or dimensions				Preinstalled lead options (stranded wire type 55A0111)		
Typical RG number	Jacket OD	Shield OD	Dielectric OD	20 AWG stranded	22 AWG stranded	24 AWG stranded
178, 179, 188, 316, 404	1.52-3.56 (.060-.140)	1.14 - 3.17 (.045-.125)	.64-2.28 (.025-.090)	D-181-1220-90/9	D-181-1222-90/9	D-181-1224-90/9
180, 279	1.9-4.3 (.075-.170)	1.52 - 3.56 (.060-.140)	.89-3.0 (.035-.118)	D-181-2220-90/9	D-181-2222-90/9	D-181-2224-90/9
141, 195, 302, 303, 400	2.54-5.2 (.100-.205)	2.16 - 4.57 (.085-.180)	1.4-3.9 (.055-.153)	D-181-3220-90/9	D-181-3222-90/9	D-181-3224-90/9

Solid wire products

Cable RG number or dimensions in mm (inches)				Preinstalled lead options (solid wire)		
Typical RG number	Jacket OD	Shield OD	Dielectric OD	26 AWG solid	30 AWG solid	22 AWG solid bus
178, 179, 188, 316, 404	1.52-3.56 (.060-.140)	1.14 - 3.17 (.045-.125)	.64-2.28 (.025-.090)	D-181-1826-6/9	D-181-1830-6/9	D-181-1622
180, 279	1.9-4.3 (.075-.170)	1.52 - 3.56 (.060-.140)	.89-3.0 (.035-.118)	D-181-2826-6/9	D-181-2830-6/9	D-181-2622
141, 195, 302, 303, 400	2.54-5.2 (.100-.205)	2.16 - 4.57 (.085-.180)	1.4-3.9 (.055-.153)	D-181-3826-6/9	D-181-3830-6/9	D-181-3622

Standard Colours are:

1. For stranded wires from 20 AWG to 24 AWG: -90/9 = white with black stripe for ground; white for centre conductor.
2. For solid wires from 26 AWG to 30 AWG -6/9 = blue for ground; white for centre conductor