

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







SPECIFICATION CONTROL DRAWING

WIRE, ELECTRIC, RADIATION-CROSSLINKED, POLYALKENE INSULATED, NORMAL WEIGHT, AIRFRAME, 600 VOLT

Date 5-25-05

Revision

AWG 2 - 0, $.010 \pm .002$ in.

F

44A0711

This specification sheet forms a part of the latest issue of Raychem Specification 44 and MIL-W-81044 as applicable.

CONDUCTOR-TIN-COATED COPPER PRIMARY INSULATION-RADIATION-CROSSLINKED, JACKET-RADIATION-CROSSLINKED, MODIFIED PVF₂, Thickness: AWG 24 - 4, .005 ± .001 in.

BRAID-PET, TREATED TO
PREVENT FRAYING
(AWG Sizes 2-0 only)

TABLE I. CONSTRUCTION DETAILS								
			(in.)		FINISHED WIRE			
PART NUMBER	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)			MAXIMUM RESISTANCE AT 20°c (ohms/1000ft)	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft)	
44A0711-24-*	24	19 x 36	MINIMUM .023	.026	26.2	.057 ± .002	3.0	
44A0711-24-*	22	19 x 34	.029	.033	16.2	.069 ± .003	4.3	
44A0711-20-*	20	19 x 32	.037	.041	9.88	.078 ± .003	6.1	
44A0711-18-*	18	19 x 30	.046	.051	6.23	.088 ± .003	8.7	
44A0711-16-*	16	19 x 29	.052	.058	4.81	.097 ± .004	10.9	
44A0711-14-*	14	19 x 27	.065	.073	3.06	.115 ± .004	16.2	
44A0711-12-*	12	37 x 28	.084	.090	2.02	.131 ± .004	24.2	
44A0711-10-*	10	37 x 26	.106	.114	1.26	.161 ± .005	36.5	
44A0711- 8-*	8	133 x 29	.158	.173	.701	.219 ± .006	65.0	
44A0711- 6-*	6	133 x 27	.198	.217	.445	.269 ± .007	103.	
44A0711- 4-*	4	133 x 25	.250	.274	.280	.325 ± .008	158.	
44A0711 - 2-*	2	665 x 30	.320	.340	.183	.418 ± .013	252.	
44A0711- 1-*	1	817 x 30	.360	.380	.149	.460 ± .015	305.	
44A0711- 0-*	0	1045 x 30	.405	.425	.116	.508 ± .017	380.	

TABLE II. PERFORMANCE DETAILS								
	BENDTESTING							
PART NUMBER 1/	MANDRE (inch	L DIAMETER) (± 3%)	WEIGHT (lb) (± 3%)					
	LIFE CYCLE AND ACCELERATED AGING	COLD BEND	+ WRAP	LIFE CYCLE AND ACCELERATED AGING	COLD BEND			
44A0711-24-*	.500	1.00	.250	1.00	3.00			
44A0711-22-*	.750	1.00	.250	3.00	3.00			
44A0711-20-*	.750	1.00	.250	4.00	4.00			
44A0711-18-*	1.00	1.50	.375	4.00	4.00			
44A0711-16-*	1.00	1.50	.375	5.00	5.00			
44A0711-14-*	1.50	2.00	.500	5.00	5.00			
44A0711-12-*	2.00	2.00	.500	5.00	5.00			
44A0711-10-*	3.00	3.00	.750	5.00	5.00			
44A0711- 8-*	3.00	4.00	.750	6.00	6.00			
44A0711- 6-*	4.00	5.00	1.00	6.00	10.0			
44A0711- 4-*	5.00	6.00	1.25	6.00	10.0			
44A0711-2-*	6.00	8.00	3.00	6.00	15.0			
44A0711-1-*	8.00	10.0	4.00	7.00	15.0			
44A0711-0-*	8.00	10.0	4.00	7.00	15.0			

⁺ See Note on Page 2

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice.

Tyco Electronics also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

Electronics

Raychem Wire & Cable 501 Oakside Avenue Redwood City, CA 94063-3800 Phone: 1-800-227-8816 Fax: 1-650-361-6297

Page 1 of 2

DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL.

THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.

^{1/}COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER, AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

SPECIFICATION CONTROL DRAWING

Maximum continuous conductor temperature VOLTAGE RATING: 600 volts (rms) at sea level

+ ACCELERATED AGING: 300 ± 2°C for 6 hours

Identification legibility, (AWG 24-4 only) 225 ± 2°C for 6 hours

BLOCKING: 150 ± 2°C for 24 hours

BRAID COLOR: Per MIL-STD-104, Class 2, except that light brown shall be within munsell color limits (see Table III); nominal, 2.5 YR 3/6

FLAMMABILITY: 30 seconds (maximum); 3 in. (maximum); no flaming of facial tissue HUMIDITY RESISTANCE: Insulation Resistance, 5000 Megohms for 1000 ft. (minimum)

IDENTIFICATION, STRIPING, OR BAND DURABILITY (AWG 24-4 only):

125 cycles (250 strokes) (minimum), 500 g weight

IMMERSION: Diameter increase 5% (maximum); no cracking, no dielectric breakdown

INSULATION ELONGATION AND TENSILE STRENGTH:

Primary Insulation.

Tensile Strength, 2500 lbf/in2 (minimum), AWG 24-12

2000 lbf/in2 (minimum), AWG 10-0

Elongation, 150% (minimum)

INSULATION FLAWS:

Primary Insulation,

SparkTest, 3.0 kV (rms) at 60 Hz

4.2 kV (rms) at 3 kHz

Impulse DielectricTest, 6.0 kV (peak)

Finished Wire:

SparkTest, 5.7 kV (rms) at 3 kHz

Impulse DielectricTest, 8.0 kV (peak)

INSULATION RESISTANCE: 5000 Megohms for 1000 ft. (minimum)

JACKET COLOR (AWG 2-0 only): White

+ LIFE CYCLE: 200 ± 2°C for 168 hours

LOW TEMPERATURE-COLD BEND: -65 ± 2°C for 4 hours

 + SHRINKAGE: 300 ± 2°C, 0.125 in. (maximum) in 12 in., AWG 24-12 300 ± 2°C, 0.250 in. (maximum) in 12 in., AWG 10-0

SMOKE: 200 ± 2°C. No visible smoke.

SOLDERABILITY: Per MIL-STD-202, Method 208, except without steam aging, Type RMA Flux

+ SURFACE RESISTANCE: 500 megohms-in. (minimum), both readings

THERMAL SHOCK: 150 ± 2°C, 0.060 in. (maximum), primary insulation and jacket only. VOLTAGE WITHSTAND (POST ENVIRONMENTAL): 2500 volts (rms), 60 Hz, 5 minutes

WICKING: 2.25 in. (maximum) between primary insulation and jacket.

PART NUMBER: The "*" in the part numbers on page 1 shall be replaced by color code designators except that Lt. brown shall be designated as -1L

For AWG 2-0, only the braid color shall be designated.

1/ Example:

AWG 20, white: 44A0711-20-9

AWG 20, white with black stripe: 44A0711-20-90 AWG 2, white jacket, Lt. brown braid: 44A0711-2-1L

 $\underline{1}$ / See footer section on page 1

+ NOTE: For AWG 2-0, these tests are conducted prior to application of the braid.

TABLE III. MUNSELL COLOR LIMITS			
HUE	5R - 5YR		
VALUE	3.0 - 5.0		
CHROMA	4.0 - 6.0		