



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!



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# SPECIFICATION CONTROL DRAWING

55/0312

TITLE	WIRE, RADIATION-CROSSLINKED MODIFIED ETFE INSULATED, ULTRA LIGHTWEIGHT, OUTER SPACE, 600 VOLT	Date	1-30-06	Revision	J
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This specification sheet forms a part of the latest issue of Raychem Specification 55/.

CONDUCTOR - SILVER-COATED COPPER

INSULATION - LOW OUTGASSING  
RADIATION-CROSSLINKED,  
MODIFIED ETFE

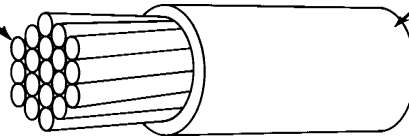


TABLE I. CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (in.)		FINISHED WIRE		
			MINIMUM	MAXIMUM	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft.)
55/0312-28-*	28	7 x 36	.0140	.0150	63.8	.0225 ± .0015	.81
55/0312-26-*	26	19 x 38	.0175	.0191	38.4	.0274 ± .0017	1.22
55/0312-24-*	24	19 x 36	.0225	.0241	24.3	.0322 ± .0017	1.80
55/0312-22-*	22	19 x 34	.0285	.0301	15.1	.0390 ± .0017	2.70
55/0312-20-*	20	19 x 32	.0365	.0385	9.19	.0495 ± .0017	4.27
55/0312-18-*	18	19 x 30	.0452	.0476	5.79	.0590 ± .0017	6.56
55/0312-16-*	16	19 x 29	.0514	.0538	4.52	.0665 ± .0019	8.33
55/0312-14-*	14	19 x 27	.0644	.0674	2.88	.0810 ± .0021	12.81
55/0312-12-*	12	37 x 28	.0825	.0865	1.90	.1000 ± .0026	19.71
55/0312-10-*	10	37 x 26	.1050	.1090	1.19	.1260 ± .0040	31.70

TABLE II. PERFORMANCE DETAILS

BEND TESTING		
PART NUMBER 1/	MANDREL DIAMETER (inch) (± 3%)	WEIGHT (lb) (± 3%)
	CROSSLINK VERIFICATION	CROSSLINK VERIFICATION
55/0312-28-*	.250	.063
55/0312-26-*	.375	.063
55/0312-24-*	.375	.125
55/0312-22-*	.500	.188
55/0312-20-*	.500	.250
55/0312-18-*	.500	.250
55/0312-16-*	.750	.375
55/0312-14-*	1.00	.500
55/0312-12-*	1.50	.750
55/0312-10-*	2.00	.750

## WIRE RATINGS AND ADDITIONAL REQUIREMENTS

### TEMPERATURE RATING: 200°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

CROSSLINK VERIFICATION: 300 ± 3°C for 1 hour

COLOR: White preferred

CONCENTRICITY: 80% (minimum)

IDENTIFICATION AND COLOR STRIPING DURABILITY:

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

INSULATION ELONGATION: 50% (minimum)

INSULATION FLAWS:

Spark Test, 1.5 kV (rms), (28 - 24 AWG)

3.0 kV (rms), (22 AWG & larger)

Impulse Dielectric Test, 6.0 kV (peak)

INSULATION THICKNESS: .004 in. (nominal)

RADIATION RESISTANCE: 500 megarads

SHRINKAGE: 230 ± 3°C for 1 hour, 0.125 in. (maximum) in 12 in.

VACUUM STABILITY:

Total Mass Loss (TML), 1.0% (maximum)

Volatle Condensable Material (VCM), 0.1% (maximum)

VOLTAGE WITHSTAND TEST (Post Environmental):

1500 volts (rms), 60 Hz, 5 minutes

PART NUMBER:

The "\*" in the part numbers above shall be replaced by color code designators.

1/ Example: AWG 20, white: 55/0312-20-9

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

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.

**tyco**

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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.