Tyco Electron

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Electronics Menlo Park,

Tyco Electronics Corporation 300 Constitutional Drive Menlo Park, CA 94025 USA

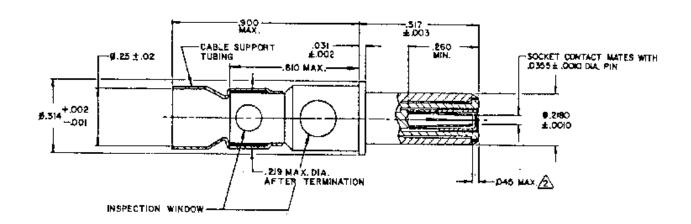
# Raychem

DOCUMENT NUMBER
D-602-0122

REVISION E

### SPECIFICATION CONTROL DRAWING

CONTACTS, ELECTRICAL CONNECTOR, PIN REMOVABLE SOLDERTACTS\*,
SHIELDED, SIZE 8
(FOR MIL-C-38999 SERIES 1, II, III, IV)



# FIGURE 1

Inches	ММ	Inches	мм	Inches	ММ	Inches	ММ
.001 .002 .010 .020	,	.031 .0355 .045 .218	,	.219 .250 .260 .314	1 ) ,	.517 .610 .900	,

#### Notes:

1. Dimensions are in inches.



Point at which a square-ended pin of the same basic diameter as the mating contact first engages the inner contact spring.

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## Requirements:

Dimensions (Figure 1), design characteristics, and configuration meet the requirements of M39029/60 (except Class A) for the cables listed in Table I herein.

Raychem Qualification Test Report: TR2-6540-018.

Mating contact: D-602-0123.

Tools: See Table II.

TABLE I. DESIGN CHARACTERISTICS

Cables Accommodated	1/	Туре	Class
M17/28 - RG 58 M17/95 - RG 180 Raychem: 5022A1X1X 7522A1X1X 7524A1X1X		COPPER ALLOY SHIELDED	125°C

1/ Other applications should be submitted to Raychem for evaluation.

TABLE II. TOOLS

Heating Tools 2/	Reflectors 2/	Holding Fixtures <u>2</u> /	Removal Tools
AA-400 Super Heater	Mini Solder Sleeve	AD-1319 with AT-1319-22	M81959/14-06
CV-5300 Mini Gun	MG~1 SolderSleeve	Adapter	

2/ See Termination Procedure: Raychem ES 61179.

Contact resistance: See Table III.

Low signal level contact resistance (inner contact only): See Table IV.

Contact engagement and separation forces (inner socket contact only): The engagement depth shall be as encountered in normal service. The test pins shall be in accordance with MS3197 except the diameters shall be as specified in the following.

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Test Pin Diameter	   Minimum	Separation Force (ounces)	Maximum Engagement Force (ounces)		
(inch)	   Initial	After Conditioning	Initial	After Conditioning	
.0365 +.0002 0000	NA-	NA NA	18.0	22.0	
.0345 +.0000	0.5	0.4	NA I	NA	

Dielectric withstanding voltage (applied between inner and outer contact):

Test voltage:

At sea level - 1300 Vac rms. At 50,000 feet - 250 Vac rms.

Tensile strength: See Table IV.

TABLE III. CONTACT RESISTANCE

	Maximum Voltage Drop (millivolts)							
Test Cable			3/ 25° +3° C		125° +3°C		Test Current (Amps)	
1	Cont	act	Cont	act	Cont	act	Cont	act
	Inner	Outer	Inner	Outer	Inner	Outer	Inner	Outer
M17/28 - RG 58 M17/95 - RG 180	TB0 120	TBD 38	TBD 144	TBD 46	<b>TB</b> D 180	TBD 57	T80 1.0	TBD 12.0
Raychem 5022A1312 7522A1311 7524A1311	73 73 52	38 TBD TBD	88 88 62	46 TBD TBD	110 110 78	57 TBD TBD	5.0 5.0 3.0	12.0 12.0 12.0

3/ After conditioning.

# TABLE IV. LOW SIGNAL LEVEL CONTACT RESISTANCE (INNER CONTACT ONLY) AND TENSILE STRENGTH

Test Cable	Contac	aximum t Resistance Iliohms)	Tensile Strength (pounds) (minimum)		
	Initial	After Conditioning	Inner Contact	Outer Contact	
M17/28 - RG 58 M17/95 - RG 180	TBD 120	TBD 144	T8D	TBD 20.0	
Raychem 5022A1312 7522A1311 7524A1311	14.6 14.6 17	17.5 17.5 21	10.0 10.0 10.0	20.0 TBD TBD	

Vibration: Test Condition VI, Letter J, per Method 2005 of MIL-STD-1344. Except directions shall be longitudinal and perpendicular. Time duration shall be 8 hours in each direction.

Shock (specified pulse): Test Condition D, per Method 2004 of MIL-STD-1344.

Materials and plating per MIL-C-39029, Type D.

#### Other materials:

Dielectric:

Fluoropolymer

Cable Tubing:

Polyvinylidene Fluoride per MIL-I-23053

Solder:

Sn63 per QQ-S-571

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REV. LETTER	PAGE		DETAILS OF F	EVISION		DATE	BY
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