

New Part Number Setup Form

Copy from SAP # _____

For Plant # 3500

Same except new part number is for - LM-6323054

Material Description 75 Ohm Double shield Coax Low Smoke

Base unit of measure FT PCS _____ Meters _____ Flexible

Total weight _____ Copper Weight _____

UL Style Number _____ UL Label type _____

CSA type _____ CSA Label type _____

This item should be considered proprietary YES

This item should be considered NC/NR YES

This item is a Military wire product YES

This item has Special pricing YES _____

Minimum order quantity 332

Planned delivery time (calendar days) Stock

Price in USD \$ 1790 /M FT or PCS

Outsourced item YES _____ NO _____

Sub contract component(s) _____

Service cost adder from outsourced supplier \$ _____

Primary supplier name Murray Benjamin SAP number _____

Supplier P/N _____ Standard putup _____ Quote # _____

Certificate of Origin on file? YES _____ NO _____

RoHS Compliant? YES _____ NO _____ EXEMPT _____

Price in USD \$ _____ /M FT or PCS Cu base _____ In effect until _____

Supplier Commodity pricing Index _____

This item can also be produced through IEWC services YES _____

Using components _____

Additional information _____

Drawing Attached
USA Colored

REV G
 SH 2
 DWG NO. 6323054

1. SCOPE

THIS DETAIL SPECIFICATION DRAWING COVERS THE SPECIAL REQUIREMENTS FOR A DOUBLE OPTIMIZED SHIELDED COAXIAL CABLE SUITABLE FOR USE ON BOARD A NAVAL SHIP IN EXPOSED WEATHER LOCATIONS. THIS CABLE ALSO INCORPORATES LOW SMOKE AND LOW TOXICITY MATERIALS IN ITS DESIGN.

2. APPLICABLE DOCUMENTS

THE FOLLOWING SPECIFICATIONS AND DRAWINGS FORM A PART OF THIS DETAIL SPECIFICATION TO THE EXTENT SPECIFIED HEREIN. UNLESS OTHERWISE SPECIFIED, THE ISSUE IN EFFECT ON THE DATE OF INVITATION FOR BID OR REQUEST FOR PROPOSAL SHALL APPLY. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS SPECIFICATION AND THE REFERENCE CITED HEREIN, THE TEXT OF THIS SPECIFICATION SHALL TAKE PRECEDENCE.

NAVSEA DRAWINGS

6323050 CABLE RADIO FREQUENCY, LOW SMOKE, GENERAL REQUIREMENTS FOR:

3. REQUIREMENTS

3.1 GENERAL

THE RF CABLE SHALL BE IN ACCORDANCE WITH NAVSEA DRAWING 6323050 AND AS SPECIFIED HEREIN. IN CASE OF CONFLICTING REQUIREMENTS, THE REQUIREMENTS LISTED HEREIN SHALL APPLY.

3.2 CONSTRUCTION

PARTS, MATERIALS AND CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH FIGURE 1 AND TABLE II HEREIN.

3.3 PHYSICAL, MECHANICAL AND ELECTRICAL REQUIREMENTS

THE CABLE SPECIFIED HEREIN SHALL CONFORM TO FIGURE 1, TABLES II, III, AND IV AND TO THE OTHER REQUIREMENTS OF NAVSEA DRAWING 6323050.

3.3.1 FLAME BARRIER MATERIALS, INCLUDING CERAMIC TAPES AND JACKET BEDDING COMPOUNDS, SHALL MEET THE REQUIREMENTS OF PARAGRAPHS 3.6.5.1 THROUGH 3.6.5.5 OF NAVSEA 6323050.

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	6323054	G
SCALE -		SH 2	



REV
G
SH
3
DWG NO. 6323054

3.4 QUALIFICATION

PROCEDURES SHALL BE IN ACCORDANCE WITH PARAGRAPHS 3.3 AND 6.3 OF NAVSEA DRAWING 6323050 AND 4.1 HEREIN

3.5 MARKING

CABLE JACKET SHALL BE MARKED WITH THE MANUFACTURER'S NAME TRADEMARK OR CAGE CODE, NAVSEA PART NUMBER AND YEAR OF MANUFACTURE AND BE PERMANENT AND LEGIBLE. MARKING SHALL NOT DAMAGE THE CABLE.

4. QUALITY ASSURANCE

4.1 QUALIFICATION INSPECTION

QUALIFICATION SHALL BE IN ACCORDANCE WITH NAVSEA 6323050, PARAGRAPH 4.3.

4.2 QUALITY CONFORMANCE INSPECTION

AS A MINIMUM, THE INSPECTION OF ALL CABLES FOR DELIVERY SHALL CONSIST OF THE GROUP A AND B INSPECTION OF NAVSEA 6323050, PARAGRAPH 4.4

4.3 PROCESS CONTROL INSPECTIONS

INSPECTIONS SHALL BE IN ACCORDANCE WITH NAVSEA 6323050, PARAGRAPH 4.5.

5. PREPARATION FOR DELIVERY

THE REQUIREMENTS OF NAVSEA 6323050, PARAGRAPH 5.0 APPLY.

6. NOTES

6.1 SUGGESTED SOURCE(S) OF SUPPLY

SOURCE 1

BRAND-REX CABLE SYSTEMS DIV.
1600 WEST MAIN ST.
WILLIMANTIC, CT 06226-1128

CAGE CODE: 71124

PART NUMBER: SEE TABLE I

SOURCE 2

RAYCHEM CORP.
300 CONSTITUTION DR.
MENLO PARK, CA 94025

CAGE CODE: 06090

PART NUMBER: SEE TABLE I



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DWG NO. 6323054
 SK 4
 REV G

6.1 SUGGESTED SOURCES(S) OF SUPPLY (CONT'D)

SOURCE 3

TIMES MICROWAVE SYSTEMS
 358 HALL AVE.
 P.O. BOX 5039
 WALLINGFORD, CT 06492-5039

CAGE CODE: 68999

PART NUMBER: SEE TABLE I

6.2

IDENTIFICATION OF THE SUGGESTED SOURCE(S) OF SUPPLY HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM DESCRIBED ON THE DRAWING.

TABLE I

NAVSEA PART NUMBER	APPLICABLE TABLE	SOURCE 1 * PART NUMBER		SOURCE 2 * PART NUMBER		SOURCE 3 * PART NUMBER	
		METHOD A	METHOD B	METHOD A	METHOD B	METHOD A	METHOD B
6323054	II, III, IV	—	T-13136	7518A8811-0**	—	AA-6897	AA-7618

* CONSTRUCTION VARIATION SHALL BE DESCRIBED IN TABLE II HEREIN, ALLOWANCE FOR EITHER METHOD A OR METHOD B.

** INACTIVE FOR NEW PROCUREMENT.

SIZE A	CAGE CODE 53711	NAVSEA DWG NO. 6323054	REV G
SCALE -	SH 4		

DWG NO. 6323054
 SH 5 REV G

TABLE II
 DESCRIPTION
 (SEE FIGURE 1)

CENTER CONDUCTOR	STRANDED CONDUCTOR, AWG 18, TIN COATED COPPER, 19/AWG 30	0.048 ± .002 IN. DIA.
DIELECTRIC CORE	CROSSLINKED POLYETHYLENE, MEDIUM DENSITY FOAM; 0.090 IN. WALL (NOM.)	.227 IN. DIA. NOMINAL
INNER SHIELD	OPTIMIZED SHIELD CONFIGURATION, APPROXIMATELY 93% AREA COVERAGE; TIN COATED COPPER CONDUCTOR. 1/	.253 IN. DIA. NOMINAL
WRAP	POLYESTER TAPE, 0.001 IN. THICK, 25% OVERLAP; 0.002 IN. WALL (NOM.)	.260 IN. DIA. NOMINAL
OUTER SHIELD	OPTIMIZED SHIELD CONFIGURATION, APPROXIMATELY 93% AREA COVERAGE; TIN COATED COPPER 1/	.290 IN. DIA. NOMINAL
WRAP	CERAMIC TAPE 0.006 IN. THICK, 50% OVERLAP; 0.012 IN. WALL NOM. 3/	.314 IN. DIA. NOMINAL
JACKET	<p>METHOD A: FILLED, CROSSLINKED, THERMOSET LOW SMOKE, LOW HALOGEN POLYMER COMPOUND, 0.053 IN. WALL (NOM.) 2/</p> <p>METHOD B: COMPOSITE/JACKET MATERIAL; FLAME BARRIER EXTRUDED LOW SMOKE, LOW HALOGEN BEDDING COMPOUND OF 50 % TOTAL JACKET THICKNESS BONDED TO FILLED, CROSSLINKED, THERMOSET LOW SMOKE, LOW HALOGEN POLYMER COMPOUND, 0.065 IN. WALL (NOM.) 2/, 3/.</p>	.420 ± .008 IN. DIA.

SIZE A	CAGE CODE 53711	NAVSEA DWG NO. 6323054	REV G
SCALE —		SH	5

DWG NO. 6323054 SH 6 REV C

TABLE II - CONTINUED

NOTES:

- 1/ OPTIMIZED SHIELDS SHALL MEET THE DIMENSIONAL REQUIREMENTS OF TABLE II AND PERFORMANCE REQUIREMENTS OF TABLE V HEREIN; AND 3.7.2.1 OF NAVSEA 6323050.
- 2/ JACKET MATERIAL SHALL MEET THE REQUIREMENTS OF PARA. 3.4.4.2 OF NAVSEA 6323050.
- 3/ CERAMIC TAPE WRAP IS NOT APPLICABLE WHEN METHOD B, COMPOSITE/JACKET MATERIAL CONSTRUCTION IS USED.

TABLE III
ENGINEERING DATA

DIMENSIONS	FIGURE 1 AND TABLE II
WATERTIGHTNESS	N/A
CHARACTERISTIC IMPEDANCE	75 ± 3 OHMS
WEIGHT	132 LBS/M FT. MAX.
OPERATING TEMPERATURE RANGE	-40 DEG TO +85 DEG C
OPERATING FREQUENCY	3 GHZ MAX
VELOCITY OF PROPAGATION	73% MIN.
CENTER CONDUCTOR RESISTANCE (DC)	6.60 OHM / M FT MAX.
CONTINUOUS WORKING VOLTAGE	2000 VRMS MAX.

SIZE A	CAGE CODE 53711	NAVSEA DWG NO. 6323054	REV G
SCALE —		SH	6'

TABLE IV

INSPECTION AND TEST REQUIREMENTS*

DWG NO. 6323054
 SH 7 REV G

PHYSICAL AND MECHANICAL	
COLD BEND (MANDREL)	5 IN. DIA / 5 LBS
BEND CYCLING (MANDREL)	200 CYCLES / 8 LBS
HEAT AGING STABILITY	YES
ADHESION OF INSULATION	7 LBS (MIN) - 50 LBS MAX
ABRASION RESISTANCE (FINISHED CABLE)	500 CYCLES MIN/ 500 GRAMS
DIMENSIONAL STABILITY CENTER CONDUCTOR FROM CORE CENTER CONDUCTOR FROM JACKET	.063 IN. MAX. .125 IN. MAX.
TENSILE AND ELONGATION JACKET (UNAGED) DIELECTRIC (UNAGED)	1300 PSI MIN/ 160% MIN 500 PSI MIN/ 100% MIN
SOLDERABILITY	N/A
ELECTRICAL	
SPARK TEST - JACKET DIELECTRIC	3000 VRMS 2700 VRMS
VOLTAGE WITHSTAND - JACKET (SPECIMEN) DIELECTRIC (SPECIMEN) DIELECTRIC (FINISHED CABLE)	5000 VRMS 5000 VRMS 2700 VRMS
CORONA EXTINCTION - DIELECTRIC	2700 VRMS
CAPACITANCE	20 PF / FT MAX.
INSULATION RESISTANCE	10,000 MEGOHMS MIN.
CAPACITANCE UNBALANCED	N/A

SIZE A	CAGE CODE 53711	NAVSEA DWG NO. 6323054	REV G
SCALE —		SH 7	

DWG NO. 6323054 SH 8 REV G

TABLE IV (CONTINUED)
INSPECTION AND TEST REQUIREMENTS *

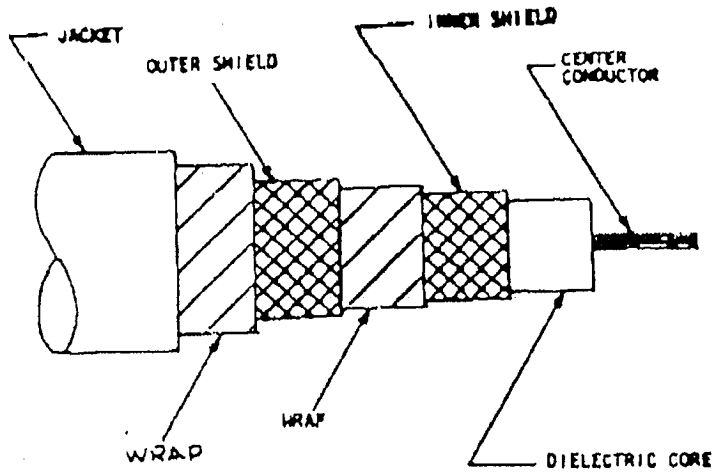
ELECTRICAL (CONTINUED)		
TRANSMISSION UNBALANCED	N/A	
TIME DELAY	N/A	
INSERTION LOSS (ATTENUATION)	10 MHZ = 1.1 DB / 100 FT 50 MHZ = 2.2 MAX. DB / 100 FT 100 MHZ = 2.9 MAX. DB / 100 FT 400 MHZ = 6.0 MAX. DB / 100 FT 1 GHZ = 11.2 MAX. DB /	
STRUCTURAL RETURN LOSS (SWEEP FREQUENCY)	100 FT 50 MHZ = 20 DB MIN. 400 MHZ = 17 DB MIN.	
SURFACE TRANSFER IMPEDANCE (BOTH SHIELDS)	500 MILLIOHMS MAX.	100 KHZ TO 1 GHZ
EMP RESPONSE (BOTH SHIELDS)	\bar{X} = 70 DB MIN	1 HZ TO 400 MHZ

* THE REQUIREMENTS AND PROCEDURES OF NAVSEA 6323050 APPLY UNLESS OTHERWISE STATED HEREIN.

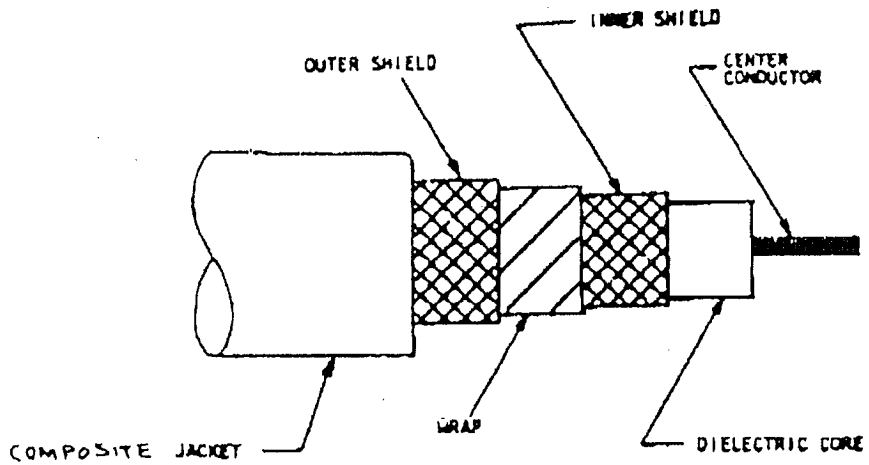
SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	6323054	G
SCALE	SH 8		

DWG NO. 6323054

REV 9



METHOD A



METHOD B

FIGURE 1
CABLE CONSTRUCTION
SEE TABLE II

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	6323054	G
SCALE	-	BH 9	