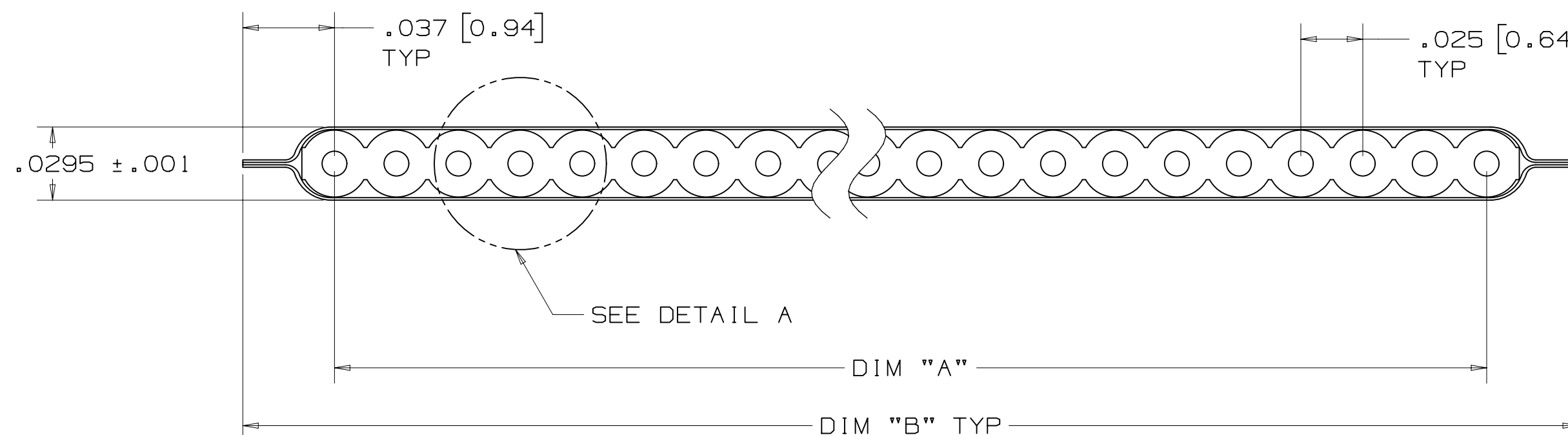


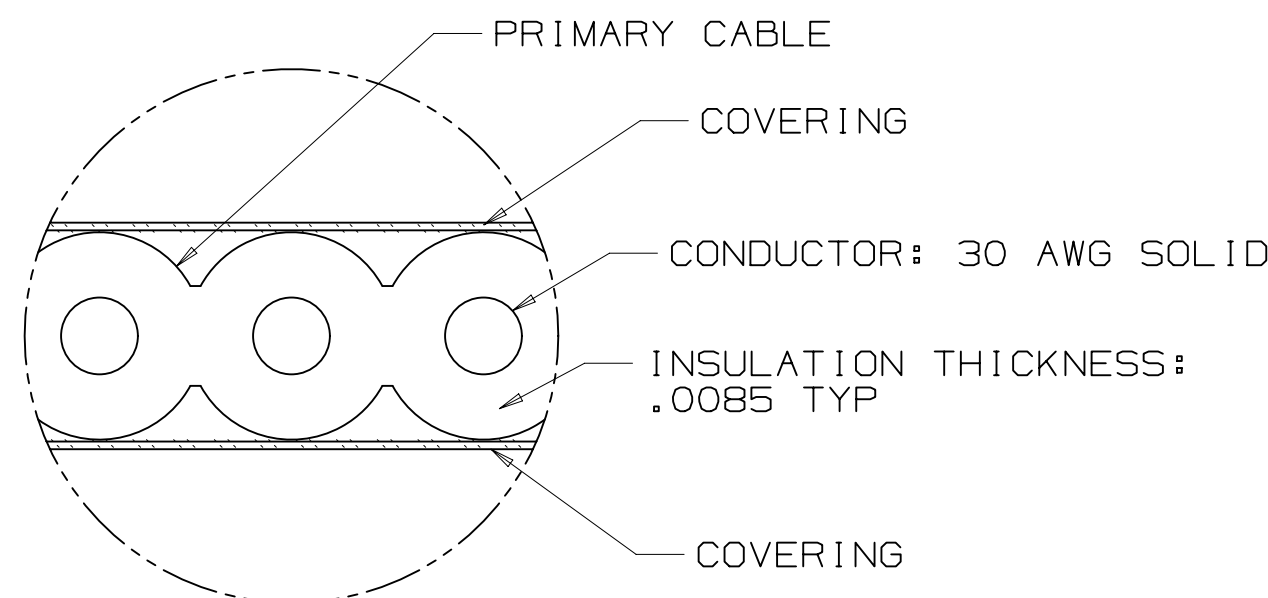
# 3M™ ROUND CONDUCTOR FLAT, CONTROLLED IMPEDANCE CABLE, 7700 SERIES

.025" 30 AWG SOLID COVERED

PERFORMANCE:	
DIFFERENTIAL IMPEDANCE:	95 ± 5 Ohms
DIFFERENTIAL INSERTION LOSS:	< 3 dB/m AT 2.5 GHz TYP.
INSULATION RESISTANCE:	>1 × 10 <sup>9</sup> Ohms AT 500 VDC
UL VOLTAGE RATING:	30V <sub>AC</sub>
UL FLAMMABILITY RATING:	HORIZONTAL FLAME FOR INTERNAL WIRING
UL WITHSTANDING VOLTAGE:	750VAC <sub>RMS</sub> AT SEA LEVEL
UL TEMPERATURE RATING:	+80° C



NUMBER OF CONDUCTORS	DIM. "A"	DIM. "B" ± .010
10	.225 ± .006 [ 5.72 ± 0.15 ]	0.300 [ 7.62 ]
14	.325 ± .006 [ 8.26 ± 0.15 ]	0.400 [ 10.16 ]
16	.375 ± .006 [ 9.53 ± 0.15 ]	0.450 [ 11.43 ]
20	.475 ± .006 [ 12.07 ± 0.15 ]	0.550 [ 13.97 ]
30	.725 ± .009 [ 18.42 ± 0.23 ]	0.800 [ 20.32 ]
50	1.225 ± .009 [ 31.12 ± 0.23 ]	1.300 [ 33.02 ]



DETAIL A  
SCALE 40:1

DIMENSIONS: INCHES [MM]  
[MM] IS REF ONLY

### ORDERING INFORMATION

7700/XX XX

PRIMARY CABLE  
0: 30 AWG SOLID 0.025" PITCH

BLANK: STANDARD  
SF: SPLICE FREE

NUMBER OF CONDUCTORS:  
(SEE TABLE 1)

3M ELECTRONICS MATERIALS SOLUTIONS DIVISION  
INTERCONNECT SOLUTIONS  
<http://www.3m.com/Interconnect>

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INFORMATION CALL 800-225-5373



UL FILE NO: E42769  
STYLE NO: 22172

### NOTES

- MATERIALS:  
CONDUCTORS: 30 AWG SOLID TIN PLATED COPPER  
INSULATION: POLYOLEFIN  
COVERING: ALUMINUM FOIL & POLYESTER
- EXAMPLE OF A DIFFERENTIAL PAIR PINOUT USING 3M™ RIBBON CABLE SOCKET, .05 X .05 PITCH, 451 SERIES IDC CONNECTOR, P/N: 45114-0X00-XX: GGSSGGSSGGSSGG  
NOTE: EDGE WIRES ARE DESIGNATED AS GROUNDS.
- CABLE PRINT CODE:  
77XX/XX 30 AWG TIN RUN# ID#
- BEFORE TERMINATING TO AN IDC CONNECTOR, COVERING MUST BE REMOVED TO PREVENT IDC SHORTING TO FOIL.
- AVAILABLE IN STANDARD 100 FT. PLEASE SPECIFY WHEN ORDERING. PLEASE CONTACT YOUR LOCAL 3M SALES REPRESENTATIVE FOR ADDITIONAL CONDUCTOR COUNTS.
- THE SURFACE OF THE RIBBON CABLE HAS A METALLIC APPEARANCE BUT IS NOT CONDUCTIVE. THERE IS A TRANSLUCENT POLYESTER OUTER LAYER OVER AN ALUMINUM FOIL LAYER, WHICH GIVES THIS APPEARANCE.
- THE CABLE CONSTRUCTION HAS A THIN CONDUCTIVE ALUMINUM LAYER AT EACH EDGE. USER SHOULD EVALUATE ITS USE IN THEIR APPLICATION AND, IF NECESSARY, INSULATING TAPE MAY BE APPLIED TO COVER THE ALUMINUM LAYER, AS USER DEEMS APPROPRIATE.
- REGULATORY INFORMATION: ROHS COMPLIANT. VISIT [WWW.3M.COM/REGS](http://WWW.3M.COM/REGS) FOR COMPLIANCE INFORMATION.

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	80113	AUG 30, 2018 REMOVED 100pos AND CHANGED FLAME RATING FROM FT2	SBCO	JV
C	74293	JUN 14, 2017 PRODUCT LAUNCH	SBC	FR
B	72021	FEB 28, 2017 UPDATED TO NEW DESIGN	SBC	JV
A	69905	SEP 20, 2016 WORK REQUEST 12281 INITIAL RELEASE	LDS	SBC

ACCESS CODES	DESIGN REFERENCE	NEXT ASSEMBLY
DRFT L SCHMIDT		
DATE AUG 23, 2016		
CHKD S CLATANOFF		
DATE SEP 13, 2016		
DIVISION	DIVISION CODE	
DO NOT SCALE DRAWING	SCALE 20/1	TOLERANCES EXCEPT AS NOTED
THIRD ANGLE PROJECTION	INCHES .0 ± .1 .00 ± .02 .000 ± .005 .0000 ± .0002	MILLIMETERS 0 ± .0 ± .00 ± .000 ±
INTERPRET PER ASME Y14.5 - 2009	MAX SURFACE ROUGHNESS 125	ALL SURFACES MARKED ONLY
ANGLES ± 1°		

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	80113	AUG 30, 2018 REMOVED 100pos AND CHANGED FLAME RATING FROM FT2	SBCO	JV
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TITLE  
ROUND CONDUCTOR FLAT,  
CNTRL IMPEDANCE 7700  
SERIES .025 CABLE

CAGE NUMBER SIZE DRAWING NO. REV.  
78-5100-2667-3 D

MODEL DET. LISTS  YES  NO SHT 1 OF 2

78-5100-2667-3  
DRAWING NUMBER

Imaged: Central Standard Time 10/15/2018 -- UTC Offset (hrs) 6

# 3M™ ROUND CONDUCTOR FLAT, CONTROLLED IMPEDANCE CABLE, 7700 SERIES

.025" 30 AWG SOLID COVERED

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DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
ACCESS CODES				DRFT	L SCHMIDT	DATE	AUG 23, 2016	MFG	DATE
				CHKD	S CLATANOFF	DATE	SEP 13, 2016	APPVL	DATE
DIVISION		DIVISION CODE		<b>3M</b> 3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2018 This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.			
DO NOT SCALE DRAWING	SCALE 1/1	TOLERANCES EXCEPT AS NOTED		TITLE ROUND CONDUCTOR FLAT, CNTRL IMPEDANCE 7700 SERIES .025 CABLE					
THIRD ANGLE PROJECTION		INCHES .0 ± .1 .00 ± .02 .000 ± .005 .0000 ± .0002		CAGE NUMBER C 78-5100-2667-3					
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS 0 ± .0 ± .00 ± .000 ±		DRAWING NO. 78-5100-2667-3					
MAX SURFACE ROUGHNESS 125 <input type="checkbox"/> ALL SURFACES <input checked="" type="checkbox"/> MARKED ONLY		ANGLES ± 1°		REV. D					
				MODEL DET. <input type="checkbox"/> LISTS <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
				SHT 2 OF 2					

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78-5100-2667-3  
DRAWING NUMBER

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[7700/100 100'SF](#) [7700/10 100'SF](#) [7700/100 100'](#) [7700/20 100'](#) [7700/30 100'SF](#) [7700/10 100'](#) [7700/16 100'](#)