

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

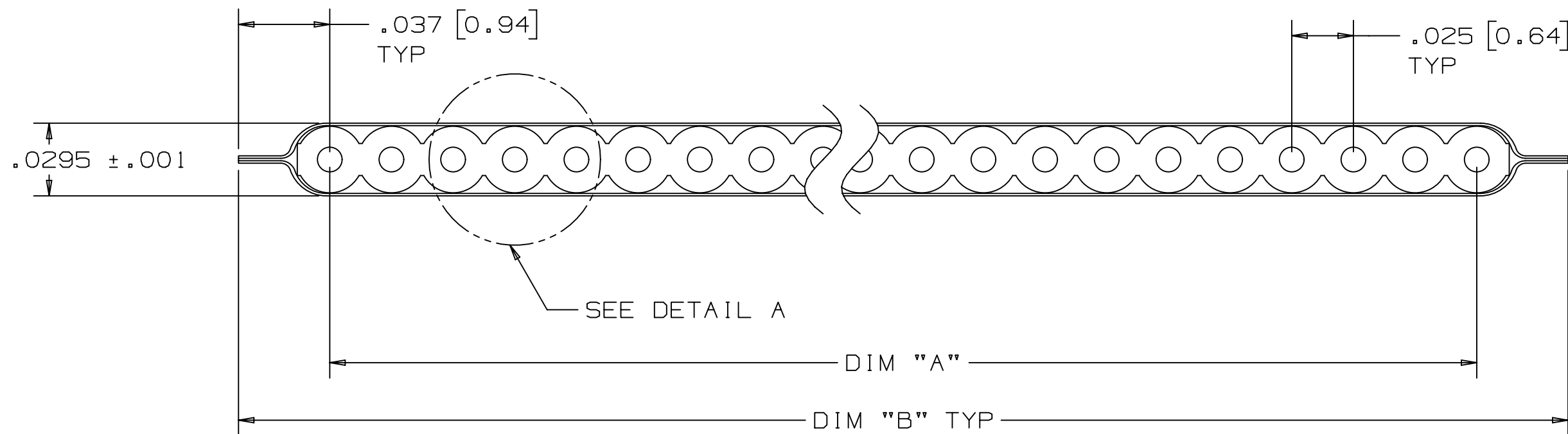
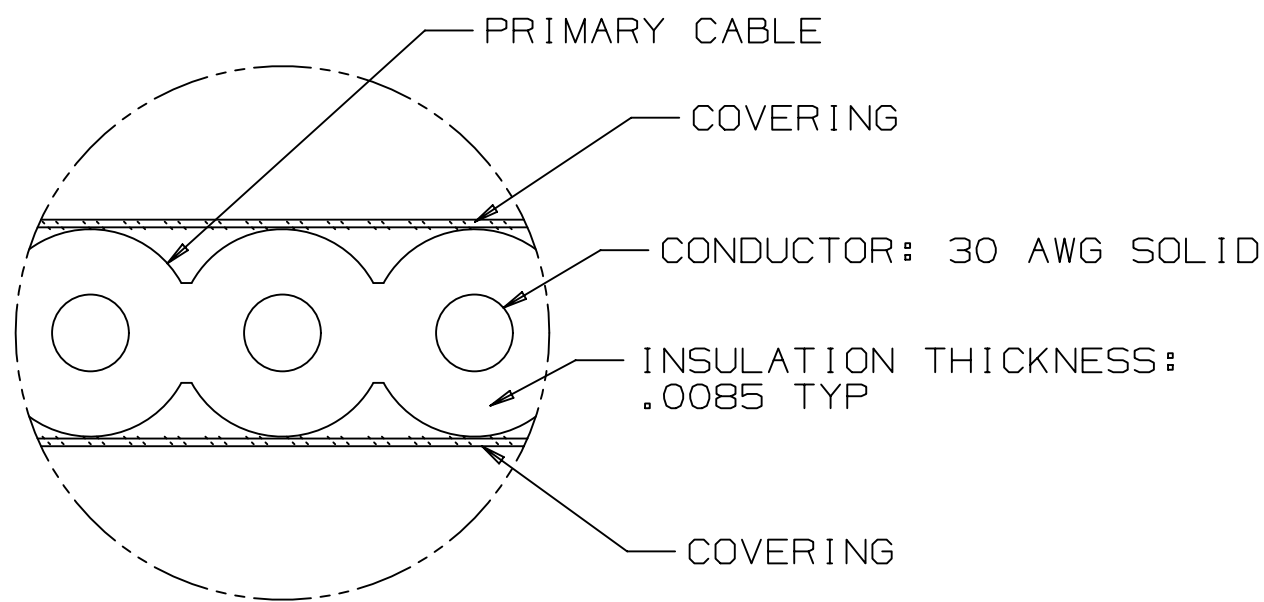


TABLE 1		
NUMBER OF CONDUCTORS	DIM. "A"	DIM. "B" ± .010
10	.225 ± .006 [ 5.72 ± 0.15 ]	0.300 [ 7.62 ]
14	.325 ± .006 [ 8.26 ± 0.15 ]	0.400 [ 10.16 ]
16	.375 ± .006 [ 9.53 ± 0.15 ]	0.450 [ 11.43 ]
20	.475 ± .006 [ 12.07 ± 0.15 ]	0.550 [ 13.97 ]
26	.625 ± .006 [ 15.88 ± 0.15 ]	0.700 [ 17.78 ]
30	.725 ± .009 [ 18.42 ± 0.23 ]	0.800 [ 20.32 ]
40	.975 ± .009 [ 24.77 ± 0.23 ]	1.050 [ 26.67 ]
50	1.225 ± .009 [ 31.12 ± 0.23 ]	1.300 [ 33.02 ]



DETAIL A  
SCALE 40:1

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 [3M.com/regs](http://3M.com/regs).

E	110777	OCT 31, 2024	JNC	FJR
D	80113	AUG 30, 2018	SBCO	JV
C	74293	JUN 14, 2017	SBC	FR
B	72021	FEB 28, 2017	SBC	JV
A	69905	SEP 20, 2016	LDS	SBC

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DRFT	L SCHMIDT	DATE AUG 23, 2016	MFG	DATE
CHKD	S CLATANOFF	DATE SEP 13, 2016	APPVL	DATE
<b>3M</b> 3M Center St. Paul, MN 55144				
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TITLE ROUND CONDUCTOR FLAT, CNTRL IMPEDANCE 7700 SERIES .025 CABLE				
CAGE NUMBER	SIZE <b>C</b>	DRAWING NO. 78-5100-2667-3	REV. E	
MODEL 7700	DET. LISTS	YES	NO	SHT 1 OF 2

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CONTROLLED IMPEDANCE CABLE, 7700 SERIES  
.025" 30 AWG SOLID COVERED

Regulatory: For regulatory information about this product, visit 3M.com/regs or contact your 3M representative.

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3M Company  
Electronics Materials Solutions Division  
13011 McCallen Pass, Bldg. C  
Austin, TX 78753-5380  
1-800-225-5373  
www.3M.com/interconnect

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INTERCONNECT SOLUTIONS  
http://www.3M.com/interconnect

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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		3M		© 3M COPYRIGHT 2024			
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THIRD ANGLE PROJECTION		INCHES		TITLE					
INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS		ROUND CONDUCTOR FLAT, CNTRL IMPEDANCE 7700 SERIES .025 CABLE					
MAX SURFACE ROUGHNESS		ALL SURFACES		CAGE NUMBER	SIZE	DRAWING NO.		REV.	
MARKED ONLY		ANGLES		7700	C	78-5100-2667-3		E	
				MODEL		DET. LISTS		YES NO SHT 2 OF 2	