

.050" 28 AWG STRANDED, MASS TERMINATABLE, HALOGEN FREE PO/PO

HF659/XX XX XX

- BLANK = STANDARD
SF = SPLICE FREE

NOTE:
AVAILABLE IN STANDARD 275FT ROLLS. CONTACT 3M
FOR AVAILABILITY OF ADDITIONAL CONDUCTOR COUNTS
AND/OR CUSTOM ROLL LENGTHS.

2 PHYSICAL :

MARKING: STANDARD: NONE
CONDUCTORS: 28 AWG, 7 X 36 AWG [7 X Ø.127] TINNED STRANDED COPPER
SHIELDING: .001 [.03] THICK ALUMINUM/POLYESTER FILM FOIL AND 90%
COVERAGE TINNED COPPER BRAID.

2 ELECTRICAL :

	UNBALANCED	BALANCED
CHARACTERISTIC IMPEDANCE:	54Ω	107Ω
CAPACITANCE:	28.7 pF/ft [84.2 pF/m]	14.4 pF/ft [47.2 pF/m]
INDUCTANCE:	.08μH/ft [.27μH/m]	.16μH/ft [.52μH/m]
PROPAGATION DELAY:	1.55 ns/ft [4.95 ns/m]	1.54 ns/ft [4.95 ns/m]
VELOCITY OF PROPAGATION:	66%	66%

NOTE: UNBALANCED IS MEASURED BETWEEN GROUND-SIGNAL-GROUND CONDUCTORS.
BALANCED IS MEASURED BETWEEN CONDUCTORS WITHIN A PAIR.
"MEASURED VALUES ARE TYPICAL"

2 ENVIRONMENTAL :

FLAMMABILITY RATING: INTERNAL: HORIZONTAL FLAME PER UL758
EXTERNAL: CABLE FLAME (VERTICAL) PER UL758

- o INSULATION.
- o ARE THE LOW
- o LOW TOXICITY
- o (-100-2-2006),
- o HTERS AND
- o ION DAMAGE TO
- o
- o EASY ROUTING.
- o HTERS PERMITS MASS
- o IDC CONNECTORS.
- o
- o ALLOWS FOR MASS
- o RS.
- o AVERAGE SHIELDING.
- o
- o R BRANCHING OR

1. REGULATORY INFORMATION:
VISIT 3M.com/regs OR CONTACT
YOUR 3M REPRESENTATIVE TO FIND
THE RoHS COMPLIANCE STATUS OF
THE 3M PART YOU ARE INTERESTED
IN.
2. IN THE EVENT OF CONFLICT
BETWEEN THIS DATA AND THAT
CONTAINED IN THE PRODUCT
SPECIFICATION, THE PRODUCT
SPECIFICATION TAKES PRECEDENT.

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INFORMATION CALL 800-225-5373



INCH [MM]			
TOLERANCE - UNLESS NOTED			
	.X	.XX	.XXX
[INCH]	±.1	±.05	±.010
[] = DIM. FOR REFERENCE ONLY			

3M™ ROUND, SHIELDED/JACKETED, FLAT CABLE, HF659 SERIES

.050" 28 AWG STRANDED, MASS TERMINATABLE, HALOGEN FREE PO/PO

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

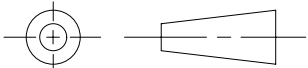
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D		79295		MAY 29,2018		JNC		BM	
				REVISED AND REDRAWN					
DESIGN REFERENCE		NEXT ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION	
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT		CHKD	
ADDRESS CODES		DRFT		CASTIGLIONE		DATE		MFG	
						MAY 29,2018		DATE	
		CHKD		DATE		APPROV		DATE	
						B. MIZE		MAY 29,2018	
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DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED		3M St. Paul, MN 55144					
		INCHES		TITLE		ROUND, SHIELDED / JACKETED, FLAT, CABLE, .050", HF659			
THIRD ANGLE PROJECTION		.0 .00 .000 .0000 ±		MILLIMETERS					
INTERPRET PER ASME Y14.5 - 2009		.0 .0 .000 ±		0 0 0 ±		CASE NUMBER			
MAX. SURFACE ROUGHNESS		.0 .0 .000 ±		0 0 0 ±		SIZE DRAWING NO.			
☒ ALL SURFACES ☐ MARKED ONLY		ANGLES		MODEL		D78-5100-2335-7			
				HF659		REV. E			
						DET. LISTS ☒ YES ☒ NO			
						SHT 2 OF 2			