

.050" 28 AWG STRANDED, HALOGEN FREE PO



JACKET MATERIAL: HALOGEN FREE POLYOLEFIN (PO)
COLOR: DARK GRAY

MARKING: NONE
STANDARD: NONE
CONDUCTORS: 28 AWG 7 X 36AWG [7 X Ø .127] TINNED STRANDED COPPER

VOLTAGE RATING: USA 300V CANADIAN 150V EU: <50V
INSULATION RESISTANCE: $>1 \times 10^{10} \Omega/10ft. (3m)$

	UNBALANCED	BALANCED
CHARACTERISTIC IMPEDANCE:	100Ω	168Ω
CAPACITANCE:	15.0 pF/ft [49.2 pF/m]	8.4 pF/ft [27.7 pF/m]
INDUCTANCE:	.15μH/ft [.49μH/m]	.24μH/ft [.79μH/m]
PROPAGATION DELAY:	1.51 ns/ft [4.95 ns/m]	1.42 ns/ft [4.66 ns/m]
VELOCITY OF PROPAGATION:	68%	72%

NOTE: UNBALANCED IS MEASURED BETWEEN GROUND-SIGNAL-GROUND CONDUCTORS.
BALANCED IS MEASURED BETWEEN CONDUCTORS WITHIN A PAIR.

TEMPERATURE RATING: -40°C TO 105°C (EIA-364-32G, METHOD A, TEST CONDITION 2)
-10°C TO +105°C (UL TEMPERATURE RATING)

FLAMMABILITY RATING: UL: HORIZONTAL

HALOGEN FREE IS DEFINED AS BOTH 1) NO HALOGEN COMPOUNDS THAT ARE INTENTIONALLY ADDED TO THE PRODUCT OR USED IN THE MANUFACTURING PROCESS FOR THE PRODUCT AND 2) ANY IMPURITIES PRESENT ARE LESS THAN 900ppm BROMINE, LESS THAN 900ppm CHLORINE AND/OR LESS THAN 1500ppm TOTAL BROMINE AND CHLORINE. THE LATTER ARE THE LEVELS SET FORTH IN CERTAIN INDUSTRY STANDARDS FOR PRINTED CIRCUIT BOARDS, SUCH AS THE INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) 61249-2-21 STANDARDS. THIS INFORMATION REPRESENTS 3M'S KNOWLEDGE AND BELIEF WHICH MAY BE BASED IN WHOLE OR IN PART ON INFORMATION PROVIDED BY 3RD PARTY SUPPLIERS TO 3M.

3M ELECTRONICS MATERIALS SOLUTIONS DIVISION
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* LOW SMOKE ZERO HALOGEN (LSZH) INSULATION. ADVANTAGES OF LSZH INSULATION ARE THE LOW SMOKE (IEC 61034-2-2005) AND LOW TOXICITY OF COMBUSTION GASES (NF X 70-100-2-2006), REDUCING THE RISK TO FIREFIGHTERS AND REDUCING THE SOOT AND CORROSION DAMAGE TO NEARBY EQUIPMENT.

* 28 AWG WIRE ON .050 INCH CENTERS PERMITS MASS TERMINATION TO BROAD LINE OF IDC CONNECTORS.

* ZIPPPABLE FOR BRANCHING OR DISCRETE TERMINATION.

TABLE 1			
NUMBER OF CONDUCTORS	3M PART NUMBER	DIM. "A"	DIM. "B"
04	HF365/04	.200+/- .010 [5.08]	.150+/- .007 [3.81]
06	HF365/06	.300+/- .010 [7.62]	.250+/- .007 [6.35]
08	HF365/08	.400+/- .010 [10.16]	.350+/- .007 [8.89]
09	HF365/09	.450+/- .010 [11.43]	.400+/- .007 [10.16]
10	HF365/10	.500+/- .010 [12.70]	.450+/- .007 [11.43]
11	HF365/11	.550+/- .010 [13.97]	.500+/- .007 [12.70]
12	HF365/12	.600+/- .010 [15.24]	.550+/- .007 [13.97]
14	HF365/14	.700+/- .010 [17.78]	.650+/- .007 [16.51]
15	HF365/15	.750+/- .010 [19.05]	.700+/- .007 [17.78]
16	HF365/16	.800+/- .015 [20.32]	.750+/- .011 [19.05]
18	HF365/18	.900+/- .015 [22.88]	.850+/- .011 [21.59]
20	HF365/20	1.000+/- .015 [25.40]	.950+/- .011 [24.13]
24	HF365/24	1.200+/- .015 [30.48]	1.150+/- .011 [29.21]
25	HF365/25	1.250+/- .015 [31.75]	1.200+/- .011 [30.48]
26	HF365/26	1.300+/- .015 [33.02]	1.250+/- .011 [31.75]
30	HF365/30	1.500+/- .020 [38.10]	1.450+/- .015 [36.83]
34	HF365/34	1.700+/- .020 [43.18]	1.650+/- .015 [41.91]
36	HF365/36	1.800+/- .020 [45.72]	1.750+/- .015 [44.45]
37	HF365/37	1.850+/- .020 [46.99]	1.800+/- .015 [45.72]
40	HF365/40	2.000+/- .020 [50.80]	1.950+/- .015 [49.53]
44	HF365/44	2.200+/- .020 [55.88]	2.150+/- .015 [54.61]
50	HF365/50	2.500+/- .020 [63.50]	2.450+/- .015 [62.23]
60	HF365/60	3.000+/- .020 [76.20]	2.950+/- .015 [74.93]
64	HF365/64	3.200+/- .020 [81.28]	3.150+/- .015 [80.01]

HF365/XX XX

— BLANK = STANDARD
SF = SPLICE FREE

— No. OF CONDUCTORS:
(SEE TABLE 1)

NOTE:
AVAILABLE IN STANDARD 100FT OR 300FT ROLLS.
PLEASE SPECIFY WHEN ORDERING.
CONTACT 3M FOR AVAILABILITY OF ADDITIONAL
CONDUCTOR COUNTS AND/OR CUSTOM ROLL LENGTHS.



UL FILE NO: E42769
STYLE NO: 21682

INCH [MM]			
TOLERANCE - UNLESS NOTED			
	.X	.XX	.XXX
INCH	±.1	±.01	±.005
[MM]	±2	±.3	±.13
[] = DIM. FOR REFERENCE ONLY			

C		79052		MAY 25, 2018		JNC	BM
REVISED AND REDRAWN							
REV		ECO		ISSUE DATE AND DESCRIPTION		DRFT	CHKD
REV		ECO		DATE		DATE	
1		CASTIGLIONE		MAY 25, 2018			
CHGD		DATE		APPROV		DATE	
				B. MIZE		MAY 25, 2018	
DIVISION		DIVISION CODE		© 3M COMPANY 2018			
EMSD		3M Center St. Paul, MN 55144		This document and the information it contains are 3M property and may not be reproduced or further disseminated without 3M permission or disclosed otherwise for 3M authorized purposes. All rights reserved.			
DO NOT SCALE DRAWING		TOLERANCES EXCEPT AS NOTED		TITLE			
SCALE 25 I		INCHES		ROUND CONDUCTOR FLAT CABLE, .050", 28AWG STRANDED, HAL-FREE			
THIRD ANGLE PROJECTION		MILLIMETERS		CAGE NUMBER			
INTERPRET PER ASME Y14.5 - 2009		INCHES		DRAWING NO.			
MAX SURFACE ROUGHNESS		MILLIMETERS		D 78-5100-2334-0			
ALL SURFACES		INCHES		REV. C			
✓ ☐ MARKED ONLY		INCHES		MODEL			
		HF365		DET. SHTS ☐ YES ☒ NO SHT 1 OF 6			

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C		79052	MAY 25,2018		JNC	BM
REV		ECO	REVISED AND REDRAWN		DRFT	CHKD
ISS		DATE		MFG		DATE
CASTIGLIONE		MAY 25,2018		B. MIZE		MAY 25,2018
CHKD		DATE		APPR		DATE
DIVISION		DIVISION CODE		EMSD		
DO NOT SCALE DRAWING		SCALE 1/1		TOLERANCES EXCEPT AS NOTED		
THIRD ANGLE PROJECTION		INCHES		MILLIMETERS		
INTERPRET PER ASME Y14.5 - 2009		0.000 ±		0.000 ±		
MAX SURFACE ROUGHNESS		0.000 ±		0.000 ±		
MARKED SURFACES		0.000 ±		0.000 ±		
MARKED ONLY		0.000 ±		0.000 ±		
CAGE NUMBER		SIZE		DRAWING NO.		REV.
D		78-5100-2334-0		C		
MODEL		HF365		DET		ISTS
YES		NO		SHT		2 OF 2