

.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:	1.15μH/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
INTERCONNECT SOLUTIONS
<http://www.3mconnectors.com>

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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.

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* ZIPPABLE FOR BRANCHING OR DISCRETE TERMINATION.
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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									
DRAWING REFERENCE		NEXT ASSEMBLY		REV		ECO		ISSUE DATE AND DESCRIPTION	
ADDRESS CODES				DATE		MAY 25, 2018		MFG DATE	
				CHKD				APPROV. DATE	
						B. MIZE		MAY 25, 2018	
DIVISION		DIVISION CODE		EMSO				© 3M COPYRIGHT 2018	
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THIRD ANGLE PROJECTION		INCHES		TITLE					
		.00 + .000 +		ROUND CONDUCTOR FLAT CABLE, .050", 28AWG STRANDED, HAL-FREE					
INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS							
MAX. SURFACE ROUGHNESS		.00 + .000 +		CAGE NUMBER		SIZE		DRAWING NO.	
□ UNFINISHED SURFACES		.00 + .000 +		D		78-5100-2334-0		REV.	
✓ □ MARKED ONLY		ANGLES		MODEL		HF365		DATE SHOWN	
								YES YES NO SHT 1 OF 2	

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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DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
XXXXXX		DRP	C	CASTIGLIONE	MAY 25,2018	MFG	
		CHKD				APPR	
						B. MIZE	MAY 25,2018
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DO NOT SCALE DRAWING	SCALE 1/1	TOLERANCES EXCEPT AS NOTED		TITLE			
		INCHES		ROUND CONDUCTOR FLAT			
		.00 ±		CABLE, .050", 28AWG			
		.002 ±		STRANDED, HAL-FREE			
		.000 ±					
THIRD ANGLE PROJECTION		MILLIMETERS					
		0 ±					
INTERPRET PER ASME Y14.5 - 2009		.0 ±					
		.00 ±					
MAX SURFACE ROUGHNESS		.000 ±					
✓ UNFINISHED SURFACES		ANGLES					
□ MARKED ONLY							
		CAGE NUMBER	SIZE	DRAWING NO.		REV.	
		D	78-5100-2334-0	C			
		MODEL	HF365		DET. LISTS		YES X NO
				SHT 2 OF 2			