

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0082285522](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch Round Conductor Flat Cable - 28 AWG (7 x 36) Stranded Topcoat, 22 Circuits, Reel 30.48m (100.0' ) Length

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR61126  
 UL E61522

**General**

Product Family Cable  
 Series [40158](#)  
 Crimp Quality Equipment Yes  
 Geographic Area Asia  
 Product Name Ribbon

**Physical**

Cable Length 30.48m (100.0' )  
 Circuits (Loaded) 22  
 Circuits (maximum) 22  
 Insulation PVC  
 Packaging Type Reel  
 Pitch - Term. Interface (in) 0.050 In  
 Pitch - Term. Interface (mm) 1.27 mm  
 Temperature Range - Operating -20°C to +105°C  
 Wire Size AWG 28  
 Wire/Cable Type (7x36) Stranded, Topcoat

**Electrical**

Current - Maximum per Contact N/A  
 Voltage - Maximum 300V

**Material Info**

Old Part Number 40158-22-100B

**Reference - Drawing Numbers**

Sales Drawing SD-40158-001



**EU RoHS**

**Compliance Status**

**Not Reviewed**

**REACH SVHC**

**Not Reviewed**

**Halogen-Free**

**Status**

**Not Reviewed**

**China RoHS**

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[40158Series](#)

**Use With**

[70121](#) MX-50™ Slimline Ribbon Cable.  
[90584](#) Picoflex® PF-50 IDT Receptacle

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7 6 5 4 3 2 1

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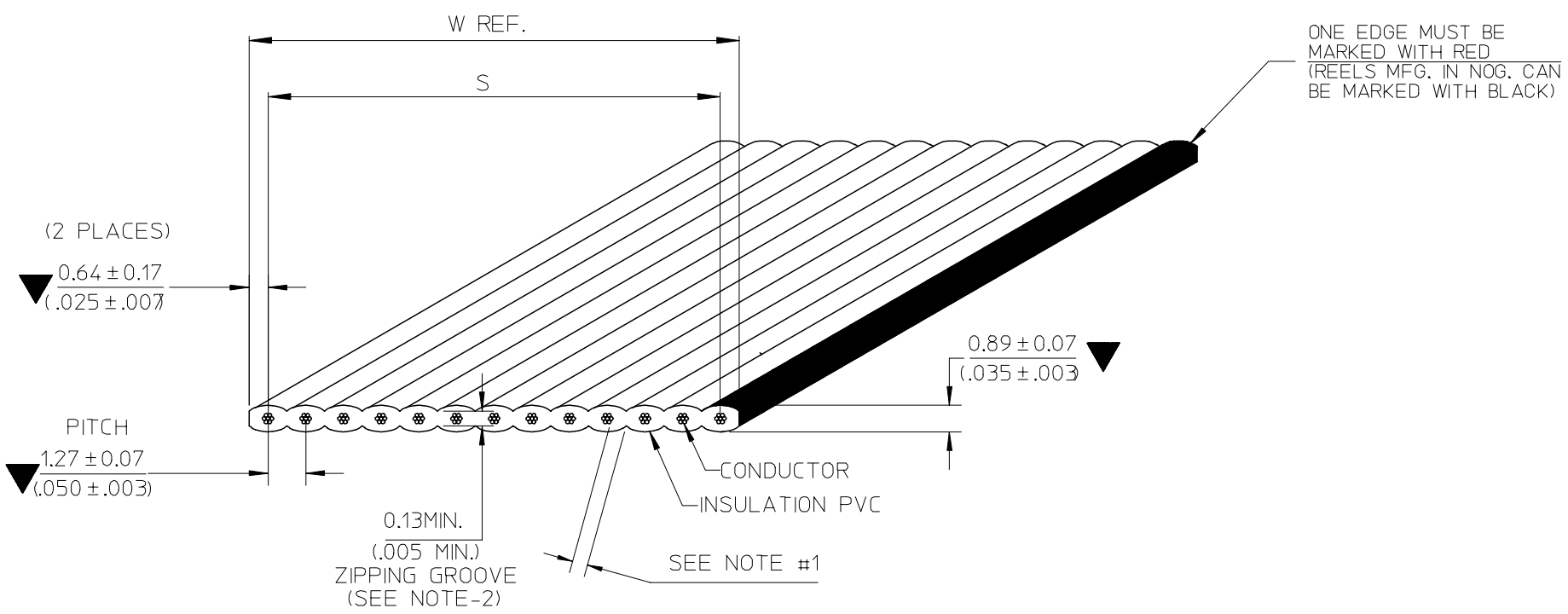
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- NOTE :
1. THE CABLE SHALL HAVE A MINIMUM OF 0.178mm. (.007") THICKNESS INSULATION AT ANY POINT
  2. RIP TEST:
    - THE 0.13mm. (.005") ZIPPING GROOVE SHALL BE CAPABLE OF BEING RIPPED BY HAND WITHIN THE RECESS, WITHOUT EXPOSING THE ADJACENT CONDUCTORS
  3. RoHS AND LEAD FREE COMPLIANT
  4. SPECIAL REQUIREMENT: N/A

B	E-07-0748	B <sub>2</sub> : ADD NON-OPERATING TEMP. B <sub>4</sub> : ADD SOLDERING CONDITION	07/10/02
A	N/A	NEW RELEASE	06/07/12
REV. HISTORY	EC NO.	DETAIL	DATE

SEE CHANGE DETAIL  
EC NO: THL2008-0015  
DRWN: CPANSAKHOM 2007/11/28  
CHKD: DNARINTARA 2007/11/29  
APPR: SVIRATJAPOL 2007/12/04

QUALITY SYMBOLS
▽=3
▽=0
DESCRIPTION
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± ---
2 PLACES	± --- ± ---
1 PLACE	± --- ± ---
ANGULAR ± ---°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM/IN	
DRAWN BY	DATE
CPANSAKHOM	2006/07/12
CHECKED BY	DATE
PMEECHAI	2006/07/12
APPROVED BY	DATE
SVIRATJAPOL	2006/07/12
MATERIAL NO.	
SEE CHART	
SIZE	
A/4	

SCALE NTS	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
TITLE		
FCB ROUND CONDUCTOR 1.27MM(.050)CENTERS PVC. 28AWG STR TOPCOATED		
MOLEX INCORPORATED		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE CHART	SD-40158-001	1 OF 3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

6 5 4 3 2 1

E

E

SPECIFICATIONS

PHYSICAL

CONDUCTOR SPACING ----- .127 (.050")  $\bar{C}$  TO  $\bar{C}$   
 WIRE GAUGE ----- 28 AWG(7/36) AWG, STRANDED TOPCOATED  
 INSULATION ----- P.V.C GRAY (LEAD FREE)

AGENCY

U.L. STYLE NO. ----- 2651  
 TEMPERATURE RATING ----- -20°C TO 105°C  
 VOLTAGE RATING ----- 300V.MAX.  
 FLAMMABILITY RATING ----- VW-1

ELECTRICAL

CONDUCTOR RESISTANCE (D.C.) ----- 68 m OHMS/FT. MAX.  
 CHARACTERISTIC IMPEDANCE ----- 123 OHMS NOM. (GS)  
 100 OHMS NOM. (GSG)  
 CAPACITANCE ----- 9.1 pF/FT. NOM. (GS)  
 17.0 pF/FT. NOM. (GSG)  
 PROPAGATION DELAY ----- 1.4 ns/FT. NOM.  
 INSULATION RESISTANCE ----- 10M OHMS (10FT. SAMPLE)  
 DIELECTRIC WITHSTAND VOLTAGE ----- 2000 VRMS/MINUTE

GENERAL

$\triangle B_2$  NON-OPERATING TEMPERATURE ----- -20°C TO 105°C  
 FAULTS AND/OR SPLICES ----- 1/REEL MAX. 100  $\pm 3_0$  FT. (30.48  $\pm 0.914$ M.)/REEL  
 20FT. (6.096M.) MIN. LENGTH

$\triangle B_1$  SOLDERING CONDITION

SOLDER TEMPERATURE ----- 260°C. MAX.  
 SOLDERING TIME ----- 3 SECOND. MAX.  
 INSULATION SHRINK ----- 2MM. NOM

D

D

C

C

B

B

A

A

SEE CHANGE DETAIL EC NO: THL2008-0015 DRWN: CPANSAKHOM 2007/11/28 CHKD: DNARINTARA 2007/11/29 APPR: SVIRATJAPOL 2007/12/04 REV B	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\blacktriangledown =$ $\triangle C =$	mm	INCH	MM/IN		NTS	INCH	DRAWN BY DATE CPANSAKHOM 2006/07/12 CHECKED BY DATE PMEECHAI 2006/07/12 APPROVED BY DATE SVIRATJAPOL 2006/07/12 MATERIAL NO. SEE CHART DOCUMENT NO. SD-40158-001 SHEET NO. 2 OF 3	
		4 PLACES $\pm$ ----	$\pm$ ----			TITLE			
	3 PLACES $\pm$ ----	$\pm$ ----							
	2 PLACES $\pm$ ----	$\pm$ ----							
	1 PLACE $\pm$ ----	$\pm$ ----							
	ANGULAR $\pm$ ----°								
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

W

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B

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ENGINEERING NO.

40158-XX-XXXX

A B C D

A : CABLE 1.27mm. (.050") CENTERS 28AWG STRANDED TOPCOATED
B : CONDUCTOR SIZE ( AVAILABILITY 3 THROUGH 50 )
C : CABLE LENGTH 100FT. (30.48M)
D : A = INCHES
B = FEET

CHART A
DIMENSIONS MM (INCHES)

Table with columns: ENG. NO., NO.OF COND., DIMENSION S, DIM. W (REF), SHIPPED ON 100FT. REELS, ENGINEERING NO., ORDER NO. Rows 40158-3 to 40158-50.



FCB ROUND CONDUCTOR
1.27MM(.050)CENTERS PVC.
28AWG STR TOPCOATED

MOLEX INCORPORATED

SD-40158-001

SHEET NO.
3 OF 3

DIMENSION STYLE
MM/IN

DRAWN BY DATE
CPANSAKHOM 2006/07/12
CHECKED BY DATE
PMEECHA 2006/07/12
APPROVED BY DATE
SVIRATJAPOL 2006/07/12

MATERIAL NO.
SEE CHART

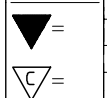
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GENERAL TOLERANCES
(UNLESS SPECIFIED)

Table with columns: mm, INCH. Rows: 4 PLACES, 3 PLACES, 2 PLACES, 1 PLACE, ANGULAR.

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

QUALITY SYMBOLS



DESCRIPTION
REV

10/12/1002 T0P0L JAP0L
6/21/1002 V0R0 N0T0R0
8/21/1002 M0H0K0P0N0S0