

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

**Part Number:** [0082285532](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch Round Conductor Flat Cable - 28 AWG (7 x 36) Stranded Topcoat, 32 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) 32  
 Circuits (maximum) 32  
 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 40158-32-100B

**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

7 6 5 4 3 2 1

E

D

C

B

A

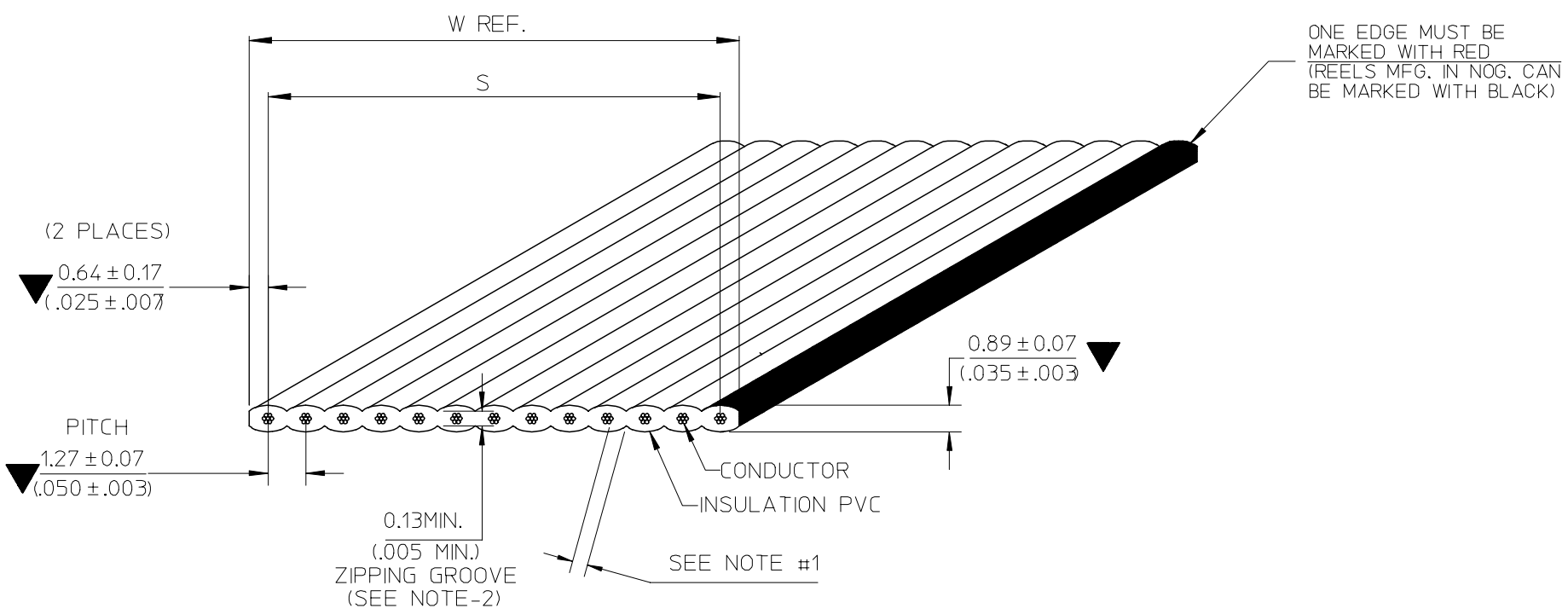
E

D

C

B

A



- 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

DESCRIPTION

QUALITY SYMBOLS

▽=3

▽=0

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	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	INCH	
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	DESCRIPTION REV	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	TITLE	FCB ROUND CONDUCTOR 1.27MM(.050)CENTERS PVC. 28AWG STR TOPCOATED	
			4 PLACES $\pm$ ----	$\pm$ ----			MOLEX INCORPORATED				
			3 PLACES $\pm$ ----	$\pm$ ----							
			2 PLACES $\pm$ ----	$\pm$ ----							
1 PLACE $\pm$ ----	$\pm$ ----	ANGULAR $\pm$ ----°		MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-40158-001		2 OF 3					
		SIZE $\triangle 4$		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

W

D

C

B

A

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
3 OF 3

DIMENSION STYLE MM/IN
DRAWN BY CPANSAKHOM DATE 2006/07/12
CHECKED BY P MEECHAI DATE 2006/07/12
APPROVED BY SVIRATJAPOL DATE 2006/07/12
MATERIAL NO. SEE CHART
SIZE A THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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

QUALITY SYMBOLS
= (triangle)
= (circle with triangle)

DESCRIPTION
REV

1

2

3

4

5

6

7

6

5

4

3

2

1