

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0082285521](#)
Status: **Active**
Description: 1.27mm (.050") Pitch Round Conductor Flat Cable - 28 AWG (7 x 36) Stranded Topcoat, 21 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) 21
 Circuits (maximum) 21
 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 40158-21-100B

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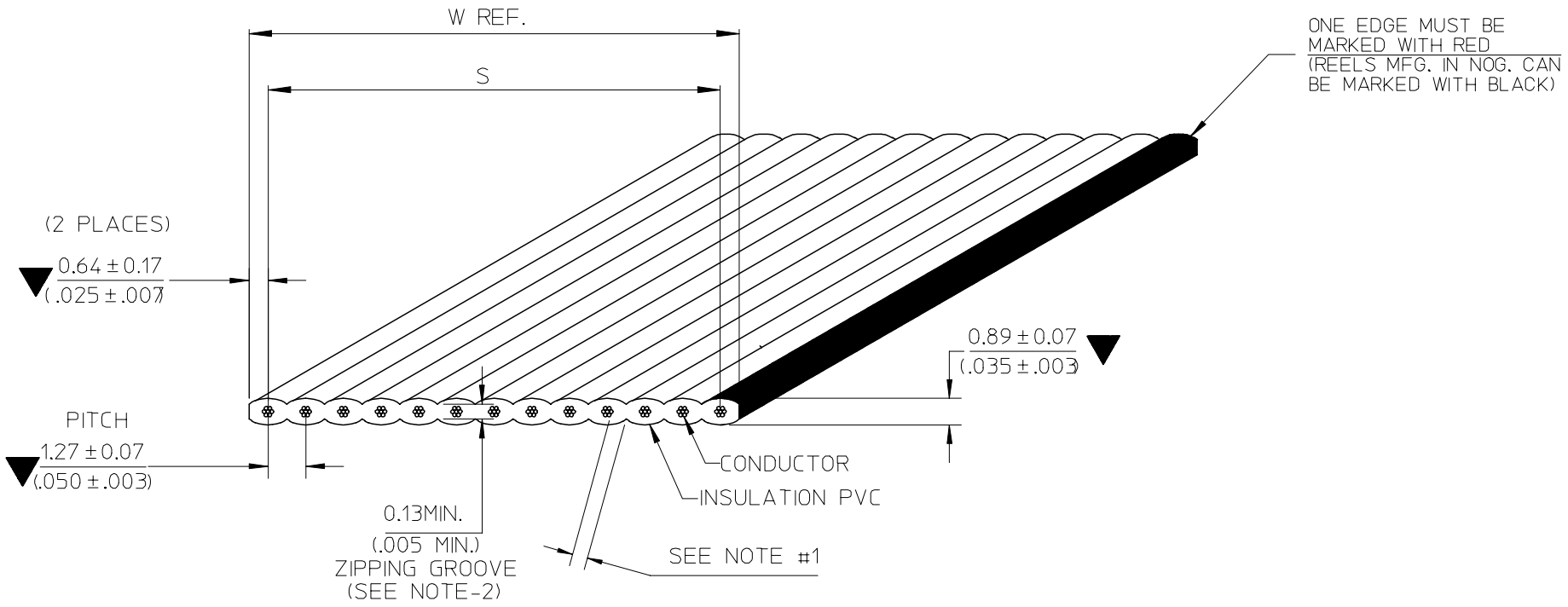
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- NOTE :
1. THE CABLE SHALL HAVE A MINIMUM OF 0.178mm. (.007") THICKNESS INSULATION AT ANY POINT
 2. RIP TEST:
 - THE 0.13mm. (.005") ZIPPING GROOVE SHALL BE CAPABLE OF BEING RIPPED BY HAND WITHIN THE RECESS, WITHOUT EXPOSING THE ADJACENT CONDUCTORS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

B	E-07-0748	B ₂ : ADD NON-OPERATING TEMP. B ₄ : 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	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		

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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

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

$\triangle B_s$ SOLDERING CONDITION

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

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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 ----	DRAWN BY DATE		TITLE			
		3 PLACES \pm ----	\pm ----	CHECKED BY DATE		FCB ROUND CONDUCTOR			
		2 PLACES \pm ----	\pm ----	APPROVED BY DATE		1.27MM(.050)CENTERS PVC.			
	1 PLACE \pm ----	\pm ----	ANGULAR \pm ----°		28AWG STR TOPCOATED				
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX MOLEX INCORPORATED				
			SIZE $\triangle 4$		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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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 1-50.



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

MOLEX INCORPORATED

SD-40158-001
3 OF 3

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 A4 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

GENERAL TOLERANCES (UNLESS SPECIFIED)
4 PLACES +/- .004
3 PLACES +/- .003
2 PLACES +/- .002
1 PLACE +/- .001
ANGULAR +/- .005
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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

DESCRIPTION
REV