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Part Number: [0082285538](#)
Status: **Active**
Description: 1.27mm (.050") Pitch Round Conductor Flat Cable - 28 AWG (7 x 36) Stranded Topcoat, 38 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) 38
 Circuits (maximum) 38
 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 40158-38-100B

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](#)

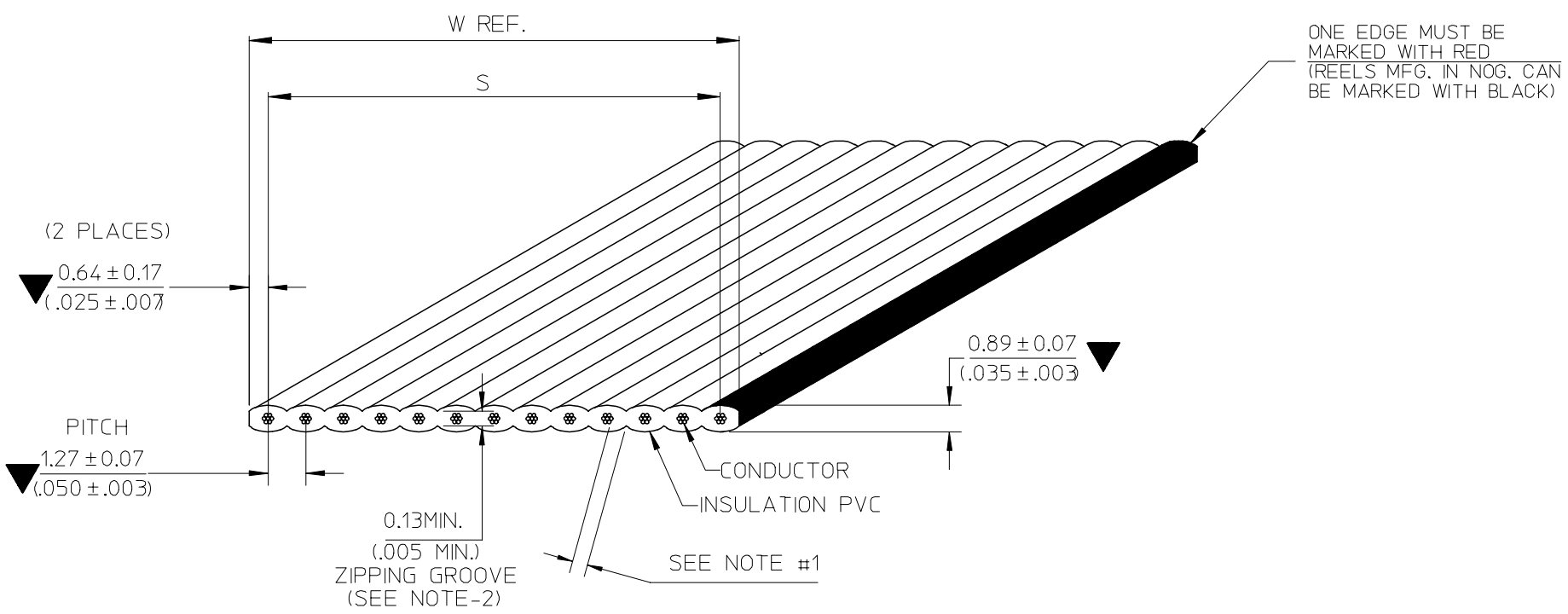
Use With

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

7 6 5 4 3 2 1

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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

D

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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	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			
			4 PLACES	\pm ---	\pm ---	DRAWN BY	DATE	TITLE				
			3 PLACES	\pm ---	\pm ---	CPANSAKHOM	2006/07/12	FCB ROUND CONDUCTOR 1.27MM(.050)CENTERS PVC. 28AWG STR TOPCOATED				
			2 PLACES	\pm ---	\pm ---	CHECKED BY	DATE	MOLEX INCORPORATED				
1 PLACE	\pm ---	\pm ---	ANGULAR \pm ---°		APPROVED BY	DATE	DOCUMENT NO.		SHEET NO.			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SVIRATJAPOL	2006/07/12	SD-40158-001		2 OF 3			
					MATERIAL NO.	SEE CHART						
					SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

W

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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)

ENG. NO.	NO.OF COND.	DIMENSION S	DIM. W (REF)	SHIPPED ON 100FT. REELS	
				ENGINEERING NO.	ORDER NO.
40158-3	3	2.54±0.18 (100±.007)	3.81 (150)	40158-03-100B	82-28-5503
40158-4	4	3.81±0.18 (150±.007)	5.08 (200)	40158-04-100B	82-28-5504
40158-5	5	5.08±0.18 (200±.007)	6.35 (250)	40158-05-100B	82-28-5505
40158-6	6	6.35±0.18 (250±.007)	7.62 (300)	40158-06-100B	82-28-5506
40158-7	7	7.62±0.18 (300±.007)	8.89 (350)	40158-07-100B	82-28-5507
40158-8	8	8.89±0.18 (350±.007)	10.16 (400)	40158-08-100B	82-28-5508
40158-9	9	10.16±0.18 (400±.007)	11.43 (450)	40158-09-100B	82-28-5509
40158-10	10	11.43±0.18 (450±.007)	12.70 (500)	40158-10-100B	82-28-5510
40158-11	11	12.70±0.18 (500±.007)	13.97 (550)	40158-11-100B	82-28-5511
40158-12	12	13.97±0.18 (550±.007)	15.24 (600)	40158-12-100B	82-28-5512
40158-13	13	15.24±0.18 (600±.007)	16.51 (650)	40158-13-100B	82-28-5513
40158-14	14	16.51±0.18 (650±.007)	17.78 (700)	40158-14-100B	82-28-5514
40158-15	15	17.78±0.18 (700±.007)	19.05 (750)	40158-15-100B	82-28-5515
40158-16	16	19.05±0.23 (750±.009)	20.32 (800)	40158-16-100B	82-28-5516
40158-17	17	20.32±0.23 (800±.009)	21.59 (850)	40158-17-100B	82-28-5517
40158-18	18	21.59±0.23 (850±.009)	22.86 (900)	40158-18-100B	82-28-5518
40158-19	19	22.86±0.23 (900±.009)	24.13 (950)	40158-19-100B	82-28-5519
40158-20	20	24.13±0.23 (950±.009)	25.40 (1000)	40158-20-100B	82-28-5520
40158-21	21	25.40±0.23 (1000±.009)	26.67 (1050)	40158-21-100B	82-28-5521
40158-22	22	26.67±0.23 (1050±.009)	27.94 (1100)	40158-22-100B	82-28-5522
40158-23	23	27.94±0.23 (1100±.009)	29.21 (1150)	40158-23-100B	82-28-5523
40158-24	24	29.21±0.23 (1150±.009)	30.48 (1200)	40158-24-100B	82-28-5524
40158-25	25	30.48±0.23 (1200±.009)	31.75 (1250)	40158-25-100B	82-28-5525
40158-26	26	31.75±0.23 (1250±.009)	33.02 (1300)	40158-26-100B	82-28-5526
40158-27	27	33.02±0.23 (1300±.009)	34.29 (1350)	40158-27-100B	82-28-5527
40158-28	28	34.29±0.23 (1350±.009)	35.56 (1400)	40158-28-100B	82-28-5528
40158-29	29	35.56±0.23 (1400±.009)	36.83 (1450)	40158-29-100B	82-28-5529
40158-30	30	36.83±0.23 (1450±.009)	38.10 (1500)	40158-30-100B	82-28-5530
40158-31	31	38.10±0.23 (1500±.009)	39.37 (1550)	40158-31-100B	82-28-5531
40158-32	32	39.37±0.23 (1550±.009)	40.64 (1600)	40158-32-100B	82-28-5532
40158-33	33	40.64±0.23 (1600±.009)	41.91 (1650)	40158-33-100B	82-28-5533
40158-34	34	41.91±0.23 (1650±.009)	43.18 (1700)	40158-34-100B	82-28-5534
40158-35	35	43.18±0.23 (1700±.009)	44.45 (1750)	40158-35-100B	82-28-5535
40158-36	36	44.45±0.23 (1750±.009)	45.72 (1800)	40158-36-100B	82-28-5536
40158-37	37	45.72±0.28 (1800±.011)	46.99 (1850)	40158-37-100B	82-28-5537
40158-38	38	46.99±0.28 (1850±.011)	48.26 (1900)	40158-38-100B	82-28-5538
40158-39	39	48.26±0.28 (1900±.011)	49.53 (1950)	40158-39-100B	82-28-5539
40158-40	40	49.53±0.28 (1950±.011)	50.80 (2000)	40158-40-100B	82-28-5540
40158-41	41	50.80±0.28 (2000±.011)	52.07 (2050)	40158-41-100B	82-28-5541
40158-42	42	52.07±0.28 (2050±.011)	53.34 (2100)	40158-42-100B	82-28-5542
40158-43	43	53.34±0.28 (2100±.011)	54.61 (2150)	40158-43-100B	82-28-5543
40158-44	44	54.61±0.28 (2150±.011)	55.88 (2200)	40158-44-100B	82-28-5544
40158-45	45	55.88±0.28 (2200±.011)	57.15 (2250)	40158-45-100B	82-28-5545
40158-46	46	57.15±0.28 (2250±.011)	58.42 (2300)	40158-46-100B	82-28-5546
40158-47	47	58.42±0.28 (2300±.011)	59.69 (2350)	40158-47-100B	82-28-5547
40158-48	48	59.69±0.28 (2350±.011)	60.96 (2400)	40158-48-100B	82-28-5548
40158-49	49	60.96±0.28 (2400±.011)	62.23 (2450)	40158-49-100B	82-28-5549
40158-50	50	62.23±0.28 (2450±.011)	63.50 (2500)	40158-50-100B	82-28-5550



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

molex MOLEX INCORPORATED

SD-40158-001
3 OF 3

DIMENSION STYLE		SCALE	DESIGN UNITS	TITLE
MM/IN		NTS	INCH	
DRAWN BY	DATE	APPROVED BY		
CPANSAKHOM	2006/07/12	DATE		
CHECKED BY	DATE	DATE		
PMEECHA	2006/07/12	DATE		
APPROVED BY	DATE	DATE		
SVIRATJAPOL	2006/07/12	DATE		
MATERIAL NO.	SEE CHART	DOCUMENT NO.	SHEET NO.	
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

GENERAL TOLERANCES (UNLESS SPECIFIED)		
	mm	INCH
4 PLACES	+ .005	+ .0004
3 PLACES	+ .005	+ .0004
2 PLACES	+ .005	+ .0004
1 PLACE	+ .005	+ .0004
ANGULAR ±.005°		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

QUALITY SYMBOLS	DESCRIPTION
	= 4 PLACES
	= 3 PLACES
	= 2 PLACES
	= 1 PLACE
	= ANGULAR ±.005°
	= DRAFT