

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [008228511](#)
Status: **Active**
Description: 1.27mm (.050") Pitch Round Conductor Flat Cable - 28 AWG (7 x 36) Stranded Topcoat, 11 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) 11
 Circuits (maximum) 11
 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 40158-11-100B

Reference - Drawing Numbers

Sales Drawing SD-40158-001



EU RoHS

**ELV and RoHS
 Compliant
 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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7 6 5 4 3 2 1

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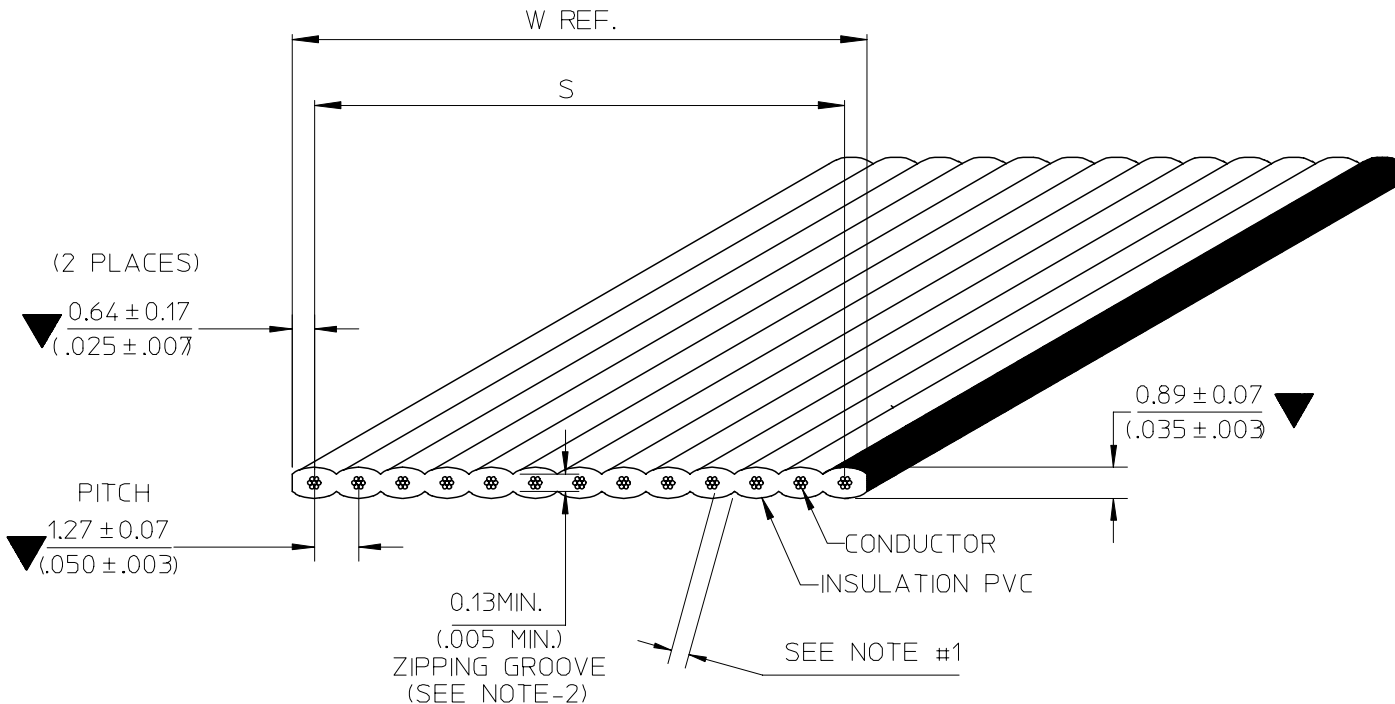
E

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ONE EDGE MUST BE MARKED WITH RED
(REELS MFG. IN NOG. CAN BE MARKED WITH BLACK)

- 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 | 4 |

| | | |
|---|-------------------|------------------------|
| SCALE NTS | DESIGN UNITS INCH | THIRD ANGLE PROJECTION |
| TITLE | | |
| FCB ROUND CONDUCTOR 1.27MM(.050)CENTERS PVC. 28AWG STR TOPCOATED | | |
| MOLEX INCORPORATED | | |
| DOCUMENT NO. | SHEET NO. | |
| 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 ± 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

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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 | 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)

| 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 |



SCALE NTS
DESIGN UNITS INCH

TITLE

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

MOLEX INCORPORATED

DOCUMENT NO. SD-40158-001
SHEET NO. 3 OF 3

DIMENSION STYLE MM/IN

DRAWN BY CPANSAKHOM DATE 2006/07/12
CHECKED BY PREECHAI 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)

| | mm | INCH |
|----------------|--------|---------|
| 4 PLACES | + .004 | + .0001 |
| 3 PLACES | + .005 | + .0002 |
| 2 PLACES | + .007 | + .0003 |
| 1 PLACE | + .010 | + .0005 |
| ANGULAR ±.005° | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

QUALITY SYMBOLS



DESCRIPTION
REV

| | | |
|------------|--------------|----------------|
| 70/12/1002 | TOPJAPOL | SVIRATJAPOL |
| 62/11/1002 | VARA | CHOKDORNARIN |
| 82/11/1002 | MOHAKHANTANA | DRWNSAKHANTANA |
| 5100-8002 | THL | ON CE |
| SEE | CHANG | DETAIL |