

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

**Part Number:** [0082186012](#)  
**Status:** **Active**  
**Description:** 3.96mm (.156") Pitch Round Conductor Flat Cable - 18 AWG (7 x 26) Stranded, Tinned, 12 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 [40174](#)  
 Crimp Quality Equipment Yes  
 Geographic Area Asia  
 Product Name Ribbon

**Physical**

Cable Length 30.48m (100.0' )  
 Circuits (Loaded) 12  
 Flammability VW-1  
 Insulation PVC  
 Packaging Type Reel  
 Pitch - Term. Interface (in) 0.156 In  
 Pitch - Term. Interface (mm) 3.96 mm  
 Temperature Range - Operating -20°C to +105°C  
 Wire Size AWG 18  
 Wire/Cable Type (7x26) Stranded, Tinned

**Electrical**

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

**Solder Process Data**

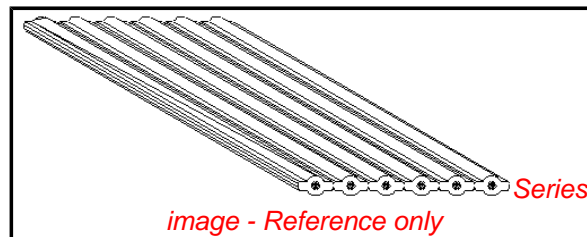
Max. Cycles at Max. Process Temperature 0

**Material Info**

Old Part Number 40174-12-100B

**Reference - Drawing Numbers**

Sales Drawing SD-40174-001



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

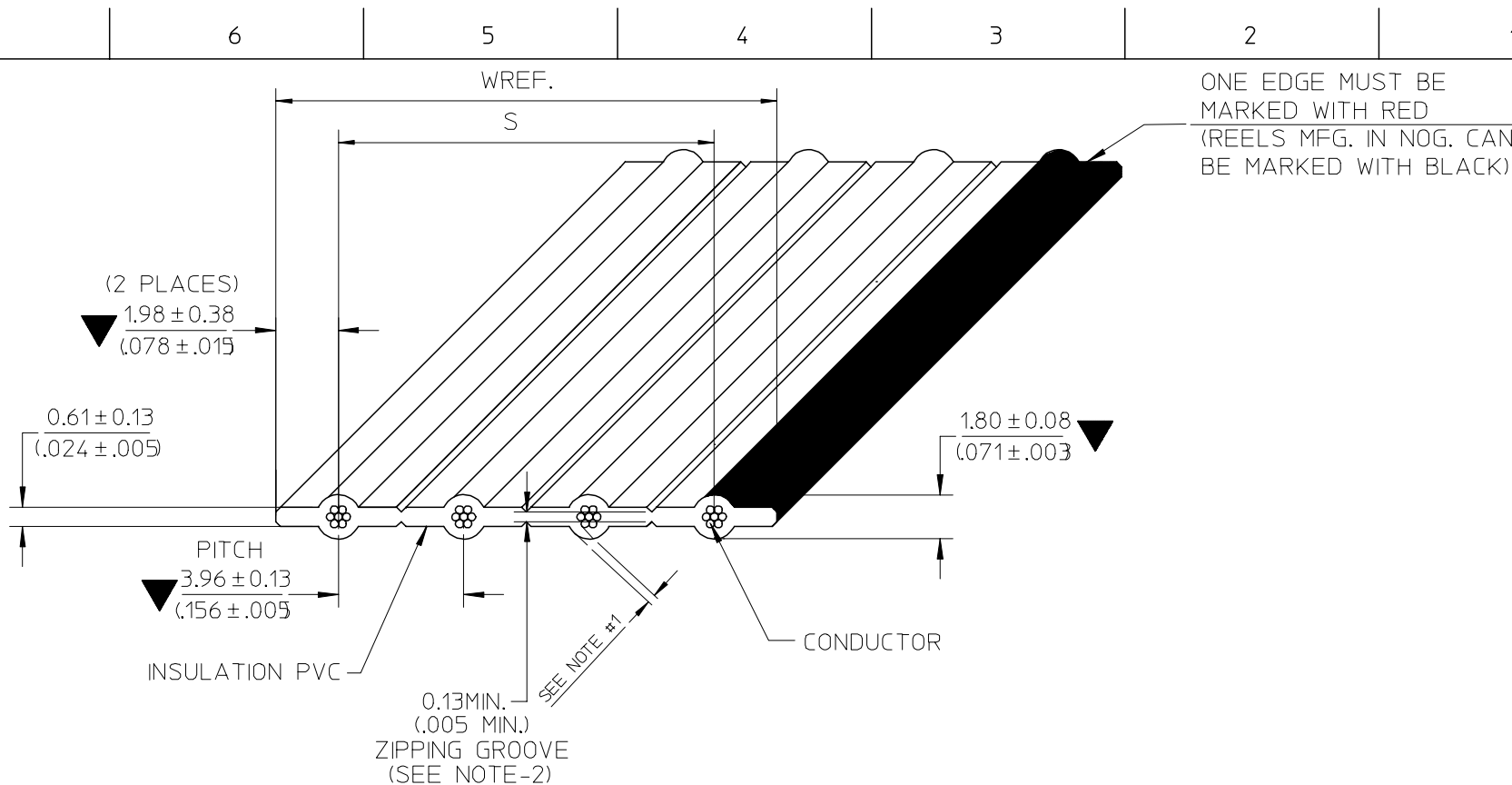
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[40174Series](#)

**Use With**

[7674](#) KK® IDT Trifurcon Contact. [7675](#) KK® IDT Double Cantilever Contact



- 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	B-07-0748	B <sub>1</sub> : ADD NON-OPERATING TEMP.	07/11/23
A	N/A	INITIAL DRAFT	06/08/09
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	DESCRIPTION
▽=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		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM/IN		NTS	INCH	
DRAWN BY	DATE	TITLE		
CPANSAKHOM	2006/08/09	FCB ROUND CONDUCTOR 3.96MM(.156)CENTERS PVC. 18AWG STRANDED TINNED		
CHECKED BY	DATE	MOLEX INCORPORATED		
PMEECHAI	2006/08/09	MATERIAL NO.      DOCUMENT NO.      SHEET NO.		
APPROVED BY	DATE	SEE CHART      SD-40174-001      1 OF 3		
SVIRATJAPOL	2006/08/09	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 ----- 3.96 (0.156")  $\text{C}$  TO  $\text{C}$   
 WIRE GAUGE ----- 18 AWG(7/26) STRANDED TINNED  
 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.) ----- 7 m OHMS/FT. MAX.  
 CHARACTERISTIC IMPEDANCE ----- 128 OHMS NOM. (GS)  
 ----- 105 OHMS NOM. (GSG)  
 CAPACITANCE ----- 5.9 pF/FT. NOM. (GS)  
 ----- 10.9 pF/FT. NOM. (GSG)  
 PROPAGATION DELAY ----- 1.4 ns/FT. NOM.  
 INSULATION RESISTANCE ----- 10<sup>4</sup>M OHMS (10FT. SAMPLE)  
 DIELECTRIC WITHSTAND VOLTAGE ----- 2000 VRMS/MINUTE

GENERAL

$\triangle$  NON-OPERATING TEMPERATURE ----- -20°C TO 105°C  
 FAULTS AND/OR SPLICES ----- 1/REEL MAX. 100<sup>+3</sup><sub>0</sub> FT. (30.48<sup>+0.914</sup><sub>0</sub> M.)/REEL  
 ----- 20FT. (6.096M.) MIN. LENGTH

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			
						MM/IN		NTS	INCH				
		$\blacktriangledown$ = $\triangle$ =		mm	INCH	DRAWN BY	DATE	TITLE					
				4 PLACES	± ---	± ---	CPANSAKHOM	2006/08/09	FCB ROUND CONDUCTOR 3.96MM(.156)CENTERS PVC. 18AWG STRANDED TINNED				
				3 PLACES	± ---	± ---	CHECKED BY	DATE					
		2 PLACES	± ---	± ---	PMEECHAI	2006/08/09	MOLEX INCORPORATED						
		1 PLACE	± ---	± ---	APPROVED BY	DATE							
		ANGULAR ± ---°		SVIRATJAPOL		2006/08/09	DOCUMENT NO.		SHEET NO.				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO.		SD-40174-001		2 OF 3			
		SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

CHART A DIMENSIONS MM. (INCHES)				SHIPPED ON 100 FT. REELS	
ENG. NO.	NO.OF COND.	DIMENSION S	DIM. W (REF)	ENGINEERING NO.	ORDER NO.
40174- 2	2	3.96±0.13 (.156±.005)	7.92 (.312)	40174-02-100B	82-18-6002
40174- 3	3	7.92±0.25 (.312±.010)	11.89 (.468)	▲ -03- ▲	▲ 03
40174- 4	4	11.89±0.38 (.468±.015)	15.85 (.624)	▲ -04- ▲	▲ 04
40174- 5	5	15.85±0.38 (.624±.015)	19.81 (.780)	▲ -05- ▲	▲ 05
40174- 6	6	19.81±0.38 (.780±.015)	23.77 (.936)	▲ -06- ▲	▲ 06
40174- 7	7	23.77±0.38 (.936±.015)	27.74 (1.092)	▲ -07- ▲	▲ 07
40174- 8	8	27.74±0.38 (1.092±.015)	31.70 (1.248)	▲ -08- ▲	▲ 08
40174- 9	9	31.70±0.38 (1.248±.015)	35.66 (1.404)	▲ -09- ▲	▲ 09
40174-10	10	35.66±0.38 (1.404±.015)	39.62 (1.560)	▲ -10- ▲	▲ 10
40174-11	11	39.62±0.38 (1.560±.015)	43.59 (1.716)	▲ -11- ▲	▲ 11
40174-12	12	43.59±0.38 (1.716±.015)	47.55 (1.872)	▲ -12- ▲	▲ 12
40174-13	13	47.55±0.38 (1.872±.015)	51.51 (2.028)	▲ -13- ▲	▲ 13
40174-14	14	51.51±0.38 (2.028±.015)	55.47 (2.184)	▲ -14- ▲	▲ 14
40174-15	15	55.47±0.38 (2.184±.015)	59.44 (2.340)	▲ -15- ▲	▲ 15
40174-16	16	59.44±0.38 (2.340±.015)	63.40 (2.496)	▼ -16- ▼	▼ 16

ENGINEERING NO.

40174-XX-XXXX

A B C D

A : CABLE 3.96mm. (.156") CENTERS 18 AWG STRANDED TINNED

B : CONDUCTOR SIZE ( AVAILABILITY 2 THROUGH 16 )

C : CABLE LENGTH 100FT. (30.48M.)

D : A= INCHES

B = FEET

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		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE NTS	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		
		4 PLACES	± ---	± ---	4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE FCB ROUND CONDUCTOR 3.96MM(.156)CENTERS PVC. 18AWG STRANDED TINNED		
		3 PLACES	± ---	± ---	3 PLACES	± ---	± ---	CPANSAKHOM	2006/08/09	MOLEX INCORPORATED		
2 PLACES	± ---	± ---	2 PLACES	± ---	± ---	CHECKED BY	DATE	DOCUMENT NO.				
1 PLACE	± ---	± ---	1 PLACE	± ---	± ---	PMEECHAI	2006/08/09	SHEET NO.				
		ANGULAR ± ---°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY		DATE				
						SVIRATJAPOL		2006/08/09				
						MATERIAL NO.		DOCUMENT NO.				
						SEE CHART		SD-40174-001		3 OF 3		
						SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
						A 4						