

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

**Part Number:** [0082225907](#)  
**Status:** **Active**  
**Description:** 3.96mm (.156") Pitch Round Conductor Flat Cable - 22 AWG (7 x 30) Stranded, Topcoat, 7 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 [8868](#)  
 Crimp Quality Equipment Yes  
 Geographic Area Asia  
 Product Name Ribbon

**Physical**

Cable Length 30.48m (100.0' )  
 Circuits (Loaded) 7  
 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 22  
 Wire/Cable Type (7x30) Stranded, Topcoat

**Electrical**

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

**Material Info**

Old Part Number 8868-07-100B

**Reference - Drawing Numbers**

Sales Drawing SD-8868-001



**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](#)

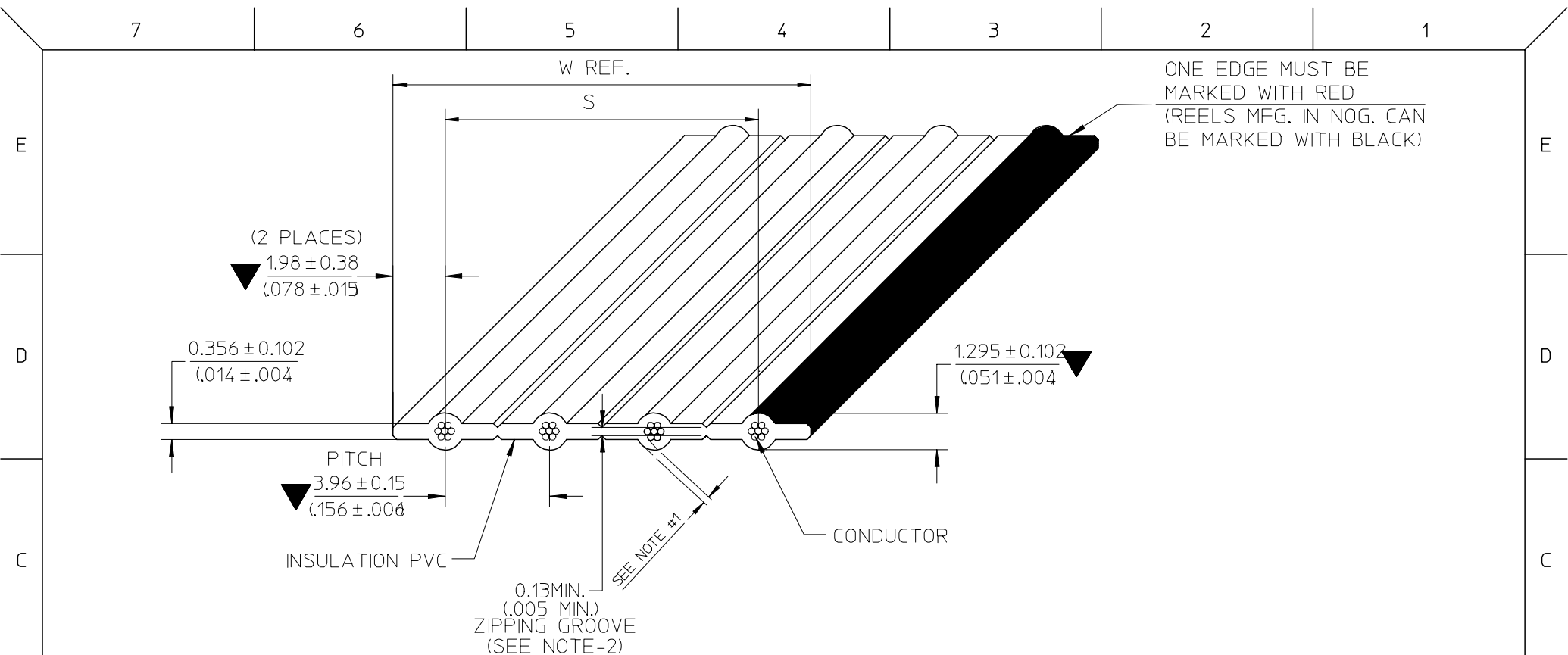
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[8868Series](#)

**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	E-07-0748	B <sub>2</sub> : ADD NON-OPERATING TEMP. B <sub>1</sub> : ADD SOLDERING CONDITION	07/09/27
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	
MM/IN	
DRAWN BY	DATE
CPANSAKHOM	2006/08/09
CHECKED BY	DATE
PMEECHAI	2006/08/09
APPROVED BY	DATE
SVIRATJAPOL	2006/08/09
MATERIAL NO.	
SEE CHART	
SIZE	
A 4	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	INCH	
TITLE		
FCB ROUND CONDUCTOR 3.96MM(.156)CENTERS PVC. 22AWG STRANDED TOPCOATED		
MOLEX INCORPORATED		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
	SD-8868-001	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 ----- 3.96 (.156")  $\phi$  TO  $\phi$   
 WIRE GAUGE ----- 22 AWG(7/30) 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.) ----- 17 m OHMS/FT. MAX.  
 CHARACTERISTIC IMPEDANCE ----- 140 OHMS NOM. (GS)  
 123 OHMS NOM. (GSG)  
 CAPACITANCE ----- 4.7 pF/FT. NOM. (GS)  
 8.5 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

$\triangle B_2$  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

$\triangle B_1$  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			
			4 PLACES	±---	±---	DRAWN BY	DATE	TITLE				
			3 PLACES	±---	±---	CPANSAKHOM	2006/08/09	FCB ROUND CONDUCTOR 3.96MM(.156)CENTERS PVC. 22AWG STRANDED TOPCOATED				
			2 PLACES	±---	±---	CHECKED BY	DATE					
1 PLACE	±---	±---	PMEECHA I	2006/08/09	MOLEX INCORPORATED							
ANGULAR ±---°			APPROVED BY		DATE	MATERIAL NO.		DOCUMENT NO.	SHEET NO.			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SVIRATJAPOL		2006/08/09	SEE CHART		SD-8868-001	2 OF 3			

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4

3

2

1

CHART A DIMENSIONS MM. (INCHES)				SHIPPED ON 100 FT. REELS	
ENG. NO.	NO. OF COND.	DIMENSION S	DIM. W (REF)	ENGINEERING NO.	ORDER NO.
8868- 2	2	3.96±0.15 (.156±.006)	7.92 (.312)	8868-02-100B	82-22-5902
8868- 3	3	7.92±0.25 (.312±.010)	11.89 (.468)	▲ -03- ▲	▲ 03
8868- 4	4	11.89±0.38 (.468±.015)	15.85 (.624)	▲ -04- ▲	▲ 04
8868- 5	5	15.85±0.38 (.624±.015)	19.81 (.780)	▲ -05- ▲	▲ 05
8868- 6	6	19.81±0.38 (.780±.015)	23.77 (.936)	▲ -06- ▲	▲ 06
8868- 7	7	23.77±0.38 (.936±.015)	27.74 (1.092)	▲ -07- ▲	▲ 07
8868- 8	8	27.74±0.38 (1.092±.015)	31.70 (1.248)	▲ -08- ▲	▲ 08
8868- 9	9	31.70±0.38 (1.248±.015)	35.66 (1.404)	▲ -09- ▲	▲ 09
8868-10	10	35.66±0.38 (1.404±.015)	39.62 (1.560)	▲ -10- ▲	▲ 10
8868-11	11	39.62±0.38 (1.560±.015)	43.59 (1.716)	▲ -11- ▲	▲ 11
8868-12	12	43.59±0.38 (1.716±.015)	47.55 (1.872)	▲ -12- ▲	▲ 12
8868-13	13	47.55±0.38 (1.872±.015)	51.51 (2.028)	▲ -13- ▲	▲ 13
8868-14	14	51.51±0.38 (2.028±.015)	55.47 (2.184)	▲ -14- ▲	▲ 14
8868-15	15	55.47±0.38 (2.184±.015)	59.44 (2.340)	▲ -15- ▲	▲ 15
8868-16	16	59.44±0.38 (2.340±.015)	63.40 (2.496)	▼ -16- ▼	▼ 16

ENGINEERING NO.

8868-XX-XXXX

A B C D

A : CABLE 3.96mm. (.156") CENTERS 22 AWG STRANDED TOPCOATED

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	
					mm	INCH	DRAWN BY CPANSAKHOM	DATE 2006/08/09	TITLE FCB ROUND CONDUCTOR 3.96MM(.156)CENTERS PVC. 22AWG STRANDED TOPCOATED		
				4 PLACES	±----	±----	CHECKED BY PMEECHAI	DATE 2006/08/09	MATERIAL NO. SEE CHART		
				3 PLACES	±----	±----	APPROVED BY SVIRATJAPOL	DATE 2006/08/09	DOCUMENT NO. SD-8868-001		
				2 PLACES	±----	±----	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 3 OF 3		
				1 PLACE	±----	±----	ANGULAR ±----°		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		