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Part Number: [0082225905](#)
Status: **Active**
Description: 3.96mm (.156") Pitch Round Conductor Flat Cable - 22 AWG (7 x 30) Stranded, Topcoat, 5 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) 5
 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 8868-05-100B

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
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

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

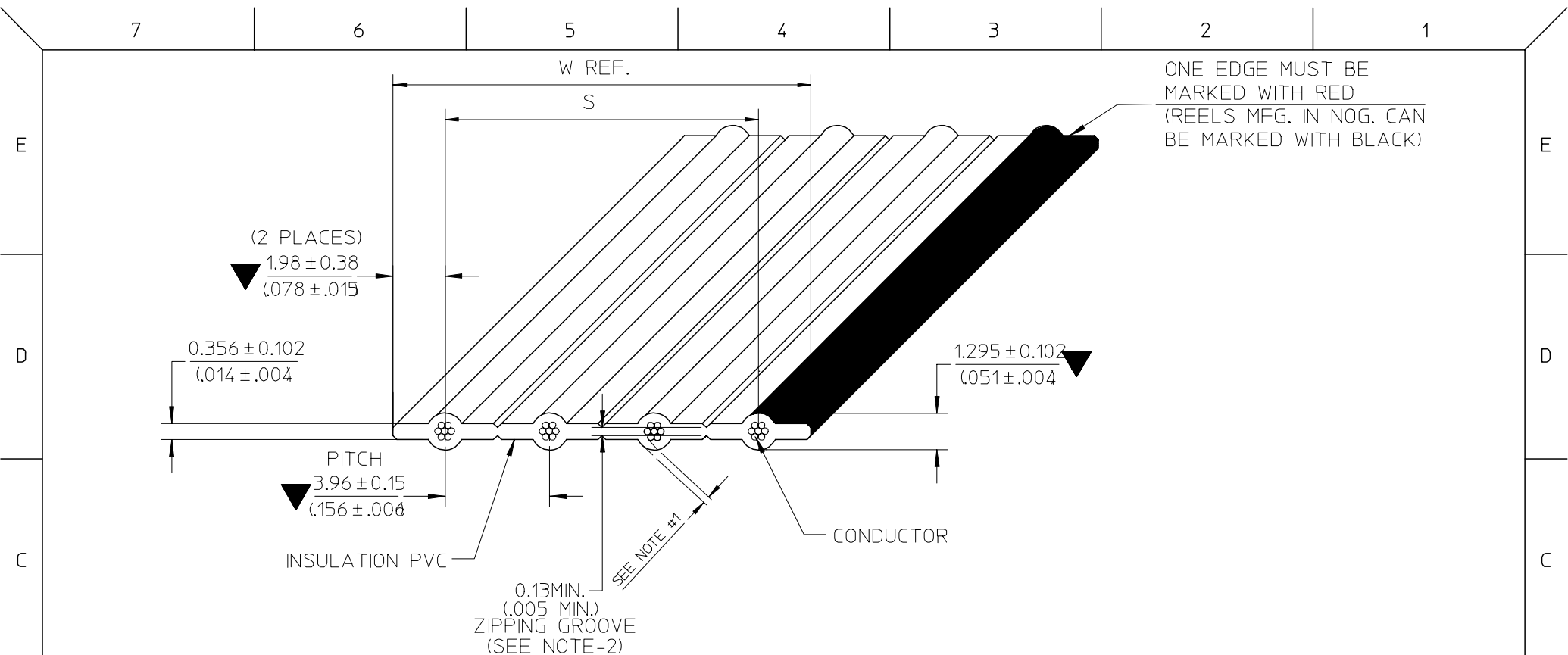
Search Parts in this Series

[8868Series](#)

Use With

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

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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 ₁ : 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.
SEE CHART	SD-8868-001	1 OF 3
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

7 6 5 4 3 2 1

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E

SPECIFICATIONS

PHYSICAL

CONDUCTOR SPACING ----- 3.96 (.156") ϕ TO ϕ
 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 ----- 10⁴ 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⁺³₀ FT. (30.48^{+0.914}₀ 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	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 2006/08/09		FCB ROUND CONDUCTOR 3.96MM(.156)CENTERS PVC. 22AWG STRANDED TOPCOATED				
		2 PLACES \pm ----	\pm ----	CHECKED BY DATE		MOLEX MOLEX INCORPORATED				
	1 PLACE \pm ----	\pm ----	PMEECHAI 2006/08/09		SD-8868-001					
	ANGULAR \pm ----°		APPROVED BY DATE		SHEET NO.					
			SVIRATJAPOL 2006/08/09		2 OF 3					
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.					
			SEE CHART		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
			SIZE							
			$\triangle A$							

6

5

4

3

2

1

7 6 5 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		
		4 PLACES	± ---	± ---	mm	INCH	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	MOLEX INCORPORATED					
1 PLACE	± ---	± ---			PMEECHAI	2006/08/09	SD-8868-001					
ANGULAR ± ---°				APPROVED BY		DATE	SHEET NO.					
				SVIRATJAPOL		2006/08/09	3 OF 3					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				MATERIAL NO.		SEE CHART		DOCUMENT NO.				
				SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

6 5 4 3 2 1