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Part Number: [0082225912](#)
Status: **Active**
Description: 3.96mm (.156") Pitch Round Conductor Flat Cable - 22 AWG (7 x 30) Stranded, Topcoat, 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 [8868](#)
 Crimp Quality Equipment Yes
 Geographic Area Asia
 Product Name Ribbon

Physical

Cable Length 30.48m (100.0')
 Circuits (Loaded) 12
 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 8868-12-100B

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](#)

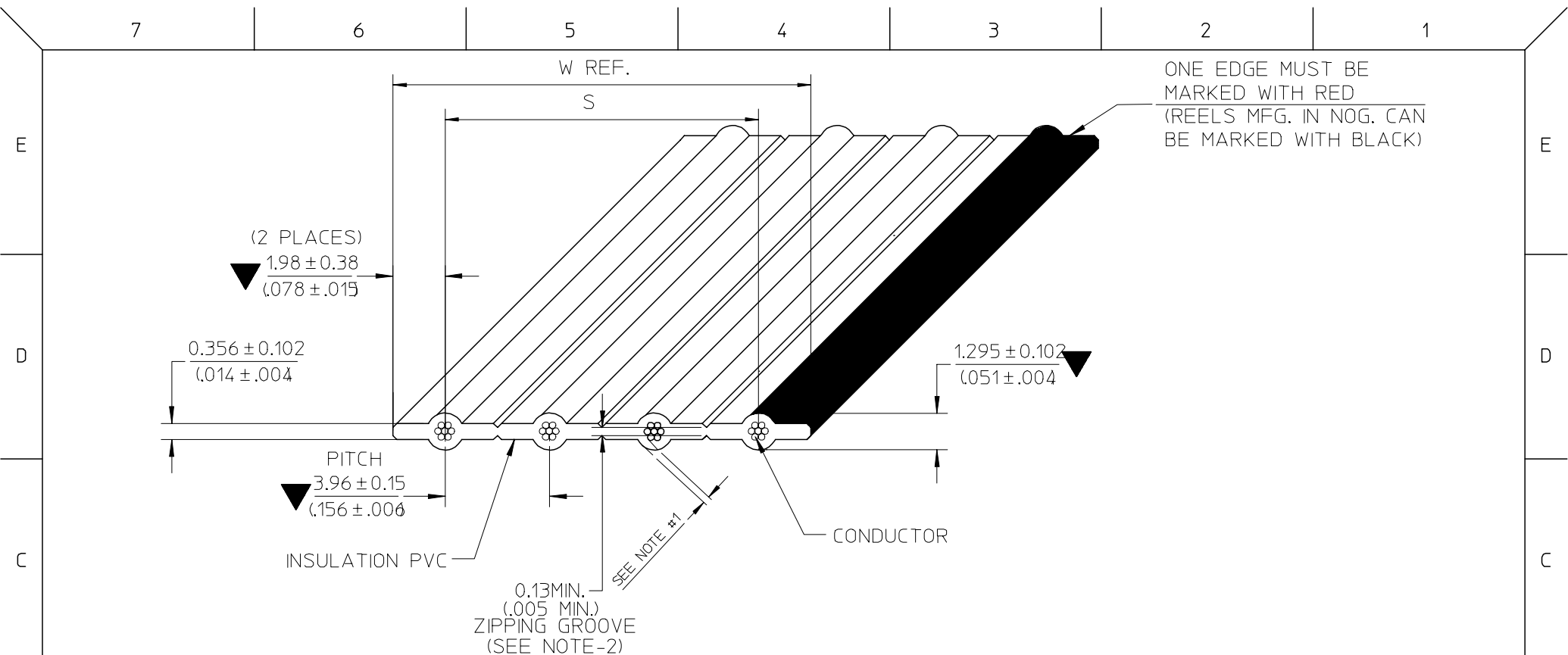
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[8868Series](#)

Use With

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



- 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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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	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 DOCUMENT NO. SD-8868-001 SHEET NO. 2 OF 3		
		4 PLACES \pm ----	\pm ----						
		3 PLACES \pm ----	\pm ----					TITLE FCB ROUND CONDUCTOR 3.96MM(.156)CENTERS PVC. 22AWG STRANDED TOPCOATED MOLEX INCORPORATED	
		2 PLACES \pm ----	\pm ----						
	1 PLACE \pm ----	\pm ----	ANGULAR \pm ----						

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

6 5 4 3 2 1