

# 3M™ HIGH ROUTABILITY INTERNAL SATA CABLE ASSEMBLY

REVISION RECORD		
REV.	ECR/ECN/ECO NUMBER	DATE
A	ECO-0037492	05/09/11
B	ECO-0042030	13/07/12
C	ECO-0043801, CABLE P/N CHG	31/12/12



- NOTES :
- Regulatory Information.  
RoHs compliant, See the regulatory information appendix(RIA) in the "RoHs compliance" section of WWW.3Mconnectors.com compliance information (RIA E1 & C1 apply)
  - For custom cable length, contact 3M sales rep.
  - Cable part number : SL8803/04-10DN5-00
  - Product Specification: PS-0117.
  - This cable construction has a thin aluminum layer at each edge. User should evaluate its use in their application and, if necessary, insulating tape may be applied to cover the aluminum layer, as User deems appropriate
  - PVC overmoulding and PE Inner moulding at both ends.
  - Product meets SATA 3.0 signal integrity specifications.

### PART NUMBER SELECTION

5602-11-0142A-XXX  
Length in mm,000 refers to 1000mm.

3M PART NO.	L(MM)
5602-11-0142A-100	100
5602-11-0142A-200	200
5602-11-0142A-300	300
5602-11-0142A-400	400
5602-11-0142A-500	500
5602-11-0142A-600	600
5602-11-0142A-700	700
5602-11-0142A-800	800
5602-11-0142A-900	900
5602-11-0142A-000	1000

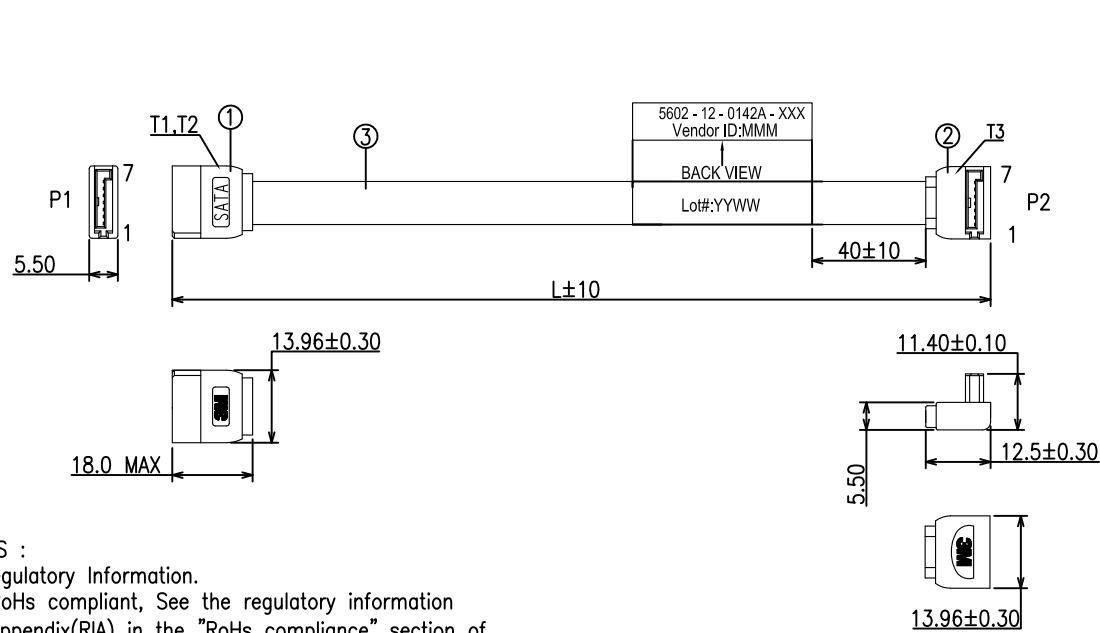
PIN OUT				
P1	TYPE	TYPE	P2	
1	G	G	1	
2	A+	A+	2	
3	A-	A-	3	
4	G	G	4	
5	B-	B-	5	
6	B+	B+	6	
7	G	G	7	

ITEM	SPECIFICATION	Q'TY	UNIT
3	CABLE : RIBBON TWIN AX , SL8803/04, UL AWM 21008,150V,80C SIGNAL -SILVER PLATED COPPER WITH 30 AWG.	1	PC
2	SATA CONN : 7P FEMALE 90° BLACK PBT30% 15*AU	1	PC
1	SATA CONN : 7P FEMALE 90° BLACK PBT30% 15*AU	1	PC

UNIT: MM	DFTG RAD VITTAPALLI	DATE 13/07/12	<b>3M</b> APAC INNOVATION CENTRE	DIVISION	ESD	STATUS
GEN. TOLERANCES	CHKD RAD VITTAPALLI	DATE 13/07/12		MODEL		RELEASE
LINEAR .0 = ± 0.25 .00 = ± 0.15 .000 = ± 0.05	APPVL ALAN ANG	DATE 13/07/12	TITLE SATA 7 PIN RIBBON TWINAX CABLE ASSEMBLY RIGHT ANGLE TO RIGHT ANGLE W/O LATCH			
ANGLE ±1°	THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO 3M COMPANY. NO REPRODUCTION OR PUBLICATION OF THIS DOCUMENT, IN WHOLE OR IN PART, SHALL BE MADE WITHOUT AUTHORIZATION FROM 3M. © 3M 2013. ALL RIGHTS RESERVED.		SIZE A3	DRAWING NO. 78-5100-4897-8	REV C	
PROJECTION	INTERPRET PER ASME Y14.5M-1994		SCALE : NTS	DET LIST	<input type="checkbox"/> YES <input type="checkbox"/> NO	SHT 1 of 7
	CRITICAL DIMENSION: ▲					

# 3M™ HIGH ROUTABILITY INTERNAL SATA CABLE ASSEMBLY

REVISION RECORD		
REV.	ECR/ECN/ECO NUMBER	DATE
REFER TO SHT 1 OF 7		



Vendor ID: MMM  
 Lot control date: YYWW  
 Part No: 5602-12-0142A-XXX

**NOTES :**

- Regulatory Information.  
 RoHs compliant, See the regulatory information appendix(RIA) in the "RoHs compliance" section of [WWW.3Mconnectors.com](http://WWW.3Mconnectors.com) compliance information (RIA E1 & C1 apply)
- For custom cable length, contact 3M sales rep.
- Cable Part number: SL8803/04-10DN5-00
- Product Specification: PS-0117.
- This cable construction has a thin aluminum layer at each edge.  
 User should evaluate its use in their application and, if necessary, insulating tape may be applied to cover the aluminum layer, as User deems appropriate
- PVC overmoulding and PE Inner moulding at both ends.
- Product meets SATA 3.0 signal integrity specifications.

**PART NUMBER SELECTION**

5602-12-0142A-XXX  
 Length in mm,000 refers to 1000mm.

3M PART NO.	L(MM)
5602-12-0142A-100	100
5602-12-0142A-200	200
5602-12-0142A-300	300
5602-12-0142A-400	400
5602-12-0142A-500	500
5602-12-0142A-600	600
5602-12-0142A-700	700
5602-12-0142A-800	800
5602-12-0142A-900	900
5602-12-0142A-000	1000

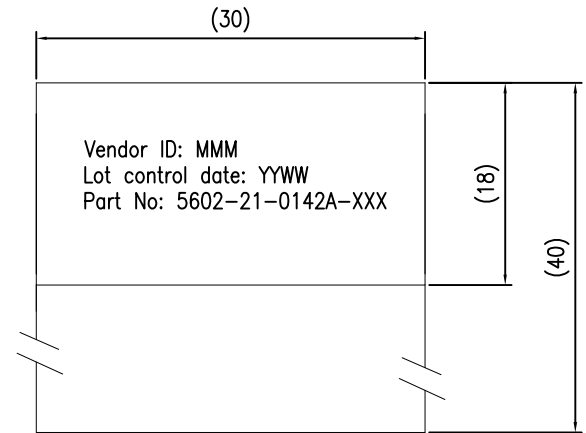
PIN OUT			
P1	TYPE	TYPE	P2
1	G	G	1
2	A+	A+	2
3	A-	A-	3
4	G	G	4
5	B-	B-	5
6	B+	B+	6
7	G	G	7

ITEM	SPECIFICATION	Q'TY	UNIT
3	CABLE : RIBBON TWIN AX , SL8803/04, UL AWM 21008,150V,80C SIGNAL -SILVER PLATED COPPER CONDUCTOR 30 AWG.	1	PC
2	SATA CONN : 7P FEMALE 90° BLACK PBT 30%GF 15*AU	1	PC
1	SATA CONN : 7P FEMALE 180° BLACK PBT 30%GF 15*AU	1	PC

UNIT: MM	DFTG RAD VITTAPALLI	DATE 13/07/12	<b>3M</b> APAC INNOVATION CENTRE	DIVISION ESD	STATUS
GEN. TOLERANCES	CHKD RAD VITTAPALLI	DATE 13/07/12		MODEL	RELEASE
LINEAR .0 = ± 0.25 .00 = ± 0.15 .000 = ± 0.05	APPVL ALAN ANG	DATE 13/07/12	TITLE SATA 7 PIN RIBBON TWINAX CABLE ASSEMBLY STRAIGHT TO RIGHT ANGLE W/O LATCH		
ANGLE ±1°	THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO 3M COMPANY. NO REPRODUCTION OR PUBLICATION OF THIS DOCUMENT, IN WHOLE OR IN PART, SHALL BE MADE WITHOUT AUTHORIZATION FROM 3M. © 3M 2013. ALL RIGHTS RESERVED.		SIZE A3	DRAWING NO. 78-5100-4897-8	REV C
PROJECTION	INTERPRET PER ASME Y14.5M-1994	SCALE : NTS		DET LIST	<input type="checkbox"/> YES <input type="checkbox"/> NO
CRITICAL DIMENSION: ▲		SHT 2 of 7			

# 3M™ HIGH ROUTABILITY INTERNAL SATA CABLE ASSEMBLY

REVISION RECORD		
REV.	ECR/ECN/ECO NUMBER	DATE
REFER TO SHT 1 OF 7		



**NOTES :**

- Regulatory Information.  
RoHs compliant, See the regulatory information appendix(RIA) in the "RoHs compliance" section of [WWW.3Mconnectors.com](http://WWW.3Mconnectors.com) compliance information (RIA E1 & C1 apply)
- For custom cable length, contact 3M sales rep.
- Cable Part number : SL8803/04-10DN5-00
- Product Specification: PS-0117.
- This cable construction has a thin aluminum layer at each edge.  
User should evaluate its use in their application and, if necessary, insulating tape may be applied to cover the aluminum layer, as User deems appropriate
- PVC overmoulding and PE Inner moulding at both ends.
- Product meets SATA 3.0 signal integrity specifications.

**PART NUMBER SELECTION**

5602-21-0142A-XXX  
Length in mm,000 refers to 1000mm.

3M PART NO.	L(MM)
5602-21-0142A-100	100
5602-21-0142A-200	200
5602-21-0142A-300	300
5602-21-0142A-400	400
5602-21-0142A-500	500
5602-21-0142A-600	600
5602-21-0142A-700	700
5602-21-0142A-800	800
5602-21-0142A-900	900
5602-21-0142A-000	1000

PIN OUT			
P1	TYPE	TYPE	P2
1	G	G	1
2	A+	A+	2
3	A-	A-	3
4	G	G	4
5	B-	B-	5
6	B+	B+	6
7	G	G	7

ITEM	SPECIFICATION	Q'TY	UNIT
3	CABLE : RIBBON TWIN AX , SL8803/04, UL AWM 21008,150V,80C	1	PC
	SIGNAL -SILVER PLATED COPPER CONDUCTOR 30 AWG.		
2	SATA CONN : 7P FEMALE 90° BLACK PBT 30%GF 15*AU	1	PC
1	SATA CONN : 7P FEMALE 180° BLACK PBT 30%GF 15*AU	1	PC

UNIT: MM	DFTG RAD VITTAPALLI	DATE 13/07/12	<b>3M</b> APAC INNOVATION CENTRE	DIVISION	ESD	STATUS
GEN. TOLERANCES	CHKD RAD VITTAPALLI	DATE 13/07/12		MODEL		RELEASE
LINEAR .0 = ± 0.25 .00 = ± 0.15 .000 = ± 0.05	APPVL ALAN ANG	DATE 13/07/12	TITLE SATA 7 PIN RIBBON TWINAX CABLE ASSEMBLY STRAIGHT TO RIGHT ANGLE W/O LATCH			
ANGLE ±1°	THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO 3M COMPANY. NO REPRODUCTION OR PUBLICATION OF THIS DOCUMENT, IN WHOLE OR IN PART, SHALL BE MADE WITHOUT AUTHORIZATION FROM 3M. © 3M 2013. ALL RIGHTS RESERVED.		SIZE A3	DRAWING NO. 78-5100-4897-8	REV C	
PROJECTION	INTERPRET PER ASME Y14.5M-1994		SCALE : NTS	DET LIST	<input type="checkbox"/> YES <input type="checkbox"/> NO	SHT 3 of 7
	CRITICAL DIMENSION: ▲					

# 3M™ HIGH ROUTABILITY INTERNAL SATA CABLE ASSEMBLY

REVISION RECORD		
REV.	ECR/ECN/ECO NUMBER	DATE
REFER TO SHT 1 OF 7		



## NOTES :

- Regulatory Information.  
RoHs compliant, See the regulatory information appendix(RIA) in the "RoHs compliance" section of WWW.3Mconnectors.com compliance information (RIA E1 & C1 apply)
- For custom cable length, contact 3M sales rep.
- Cable Part number: SL8803/04-10DN5-00
- Product Specification: PS-0117.
- This cable construction has a thin aluminum layer at each edge. User should evaluate its use in their application and, if necessary, insulating tape may be applied to cover the aluminum layer, as User deems appropriate
- PVC overmoulding and PE Inner moulding at both ends.
- Product meets SATA 3.0 signal integrity specifications.

## PART NUMBER SELECTION

5602-22-0142A-XXX  
Length in mm,000 refers to 1000mm.

3M PART NO.	L(MM)
5602-22-0142A-100	100
5602-22-0142A-200	200
5602-22-0142A-300	300
5602-22-0142A-400	400
5602-22-0142A-500	500
5602-22-0142A-600	600
5602-22-0142A-700	700
5602-22-0142A-800	800
5602-22-0142A-900	900
5602-22-0142A-000	1000

PIN OUT			
P1	TYPE	TYPE	P2
1	G	G	1
2	A+	A+	2
3	A-	A-	3
4	G	G	4
5	B-	B-	5
6	B+	B+	6
7	G	G	7

ITEM	SPECIFICATION	Q'TY	UNIT
2	CABLE : RIBBON TWIN AX , SL8803/04, UL AWM 21008,150V,80C	1	PC
	SIGNAL -SILVER PLATED COPPER CONDUCTOR WITH 30 AWG.		
1	SATA CONN : 7P FEMALE 180° BLACK PBT 30GF , 15"AU	2	PCS

UNIT: MM	DFTG RAD VITTAPALLI	DATE 13/07/12		DIVISION	ESD	STATUS
GEN. TOLERANCES	CHKD RAD VITTAPALLI	DATE 13/07/12		MODEL		RELEASE
LINEAR .0 = ± 0.25 .00 = ± 0.15 .000 = ± 0.05	APPVL ALAN ANG	DATE 13/07/12	TITLE	SATA 7 PIN RIBBON TWINAX CABLE ASSEMBLY STRAIGHT TO STRAIGHT W/O LATCH		
ANGLE ±1°	THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO 3M COMPANY. NO REPRODUCTION OR PUBLICATION OF THIS DOCUMENT, IN WHOLE OR IN PART, SHALL BE MADE WITHOUT AUTHORIZATION FROM 3M. © 3M 2013. ALL RIGHTS RESERVED.		SIZE A3	DRAWING NO.	78-5100-4897-8	REV C
PROJECTION	INTERPRET PER ASME Y14.5M-1994		SCALE : NTS	DET LIST	<input type="checkbox"/> YES <input type="checkbox"/> NO	SHT 4 of 7
	CRITICAL DIMENSION: ▲					

# 3M™ HIGH ROUTABILITY INTERNAL SATA CABLE ASSEMBLY

REVISION RECORD		
REV.	ECR/ECN/ECO NUMBER	DATE
REFER TO SHIT 1 OF 7		



### NOTES :

- Regulatory Information.  
RoHs compliant, See the regulatory information appendix(RIA) in the "RoHs compliance" section of WWW.3Mconnectors.com compliance information (RIA E1 & C1 apply)
- For custom cable length, contact 3M sales rep.
- Cable part number: SL8803/04-10DN5-00
- Product Specification: PS-0117.
- This cable construction has a thin aluminum layer at each edge. User should evaluate its use in their application and, if necessary, insulating tape may be applied to cover the aluminum layer, as User deems appropriate
- PVC overmoulding and PE Inner moulding at both ends.
- Product meets SATA 3.0 signal integrity specifications.

### PART NUMBER SELECTION

5602-33-0142A-XXX  
Length in mm,000 refers to 1000mm.

3M PART NO.	L(MM)
5602-33-0142A-100	100
5602-33-0142A-200	200
5602-33-0142A-300	300
5602-33-0142A-400	400
5602-33-0142A-500	500
5602-33-0142A-600	600
5602-33-0142A-700	700
5602-33-0142A-800	800
5602-33-0142A-900	900
5602-33-0142A-000	1000

### PIN OUT

P1	TYPE	TYPE	P2
1	G	G	1
2	A+	A+	2
3	A-	A-	3
4	G	G	4
	G	G	
5	B-	B-	5
6	B+	B+	6
7	G	G	7

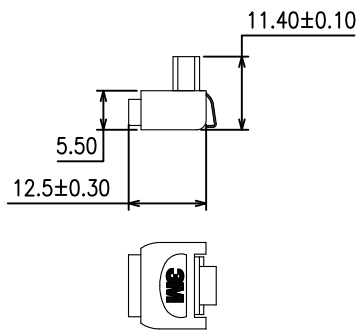
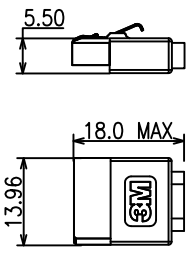
ITEM	SPECIFICATION	Q'TY	UNIT
3	CABLE : RIBBON TWIN AX , SL8803/04, UL AWM 21008,150V,80C SIGNAL -SILVER PLATED COPPER WITH 30 AWG.	1	PC
2	SATA CONN : 7P FEMALE 90° BLACK PBT30% 15*AU WITH LATCH	1	PC
1	SATA CONN : 7P FEMALE 90° BLACK PBT30% 15*AU WITH LATCH	1	PC

UNIT: MM	DFTG RAD VITTAPALLI	DATE 13/07/12	<b>3M</b> APAC INNOVATION CENTRE	DIVISION ESD	STATUS RELEASE
GEN. TOLERANCES	CHKD RAD VITTAPALLI	DATE 13/07/12		MODEL	
LINEAR .0 = ± 0.25 .00 = ± 0.15 .000 = ± 0.05	APPVL ALAN ANG	DATE 13/07/12	TITLE SATA 7 PIN RIBBON TWINAX CABLE ASSEMBLY RIGHT ANGLE TO RIGHT ANGLE WITH LATCH		
ANGLE ±1°	THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO 3M COMPANY. NO REPRODUCTION OR PUBLICATION OF THIS DOCUMENT, IN WHOLE OR IN PART, SHALL BE MADE WITHOUT AUTHORIZATION FROM 3M. © 3M 2013. ALL RIGHTS RESERVED.		SIZE A3	DRAWING NO. 78-5100-4897-8	REV C
PROJECTION	INTERPRET PER ASME Y14.5M-1994	SCALE : NTS		DET LIST <input type="checkbox"/> YES <input type="checkbox"/> NO	SHT 5 of 7
CRITICAL DIMENSION: ▲					

WWW.3Mconnectors.com

# 3M™ HIGH ROUTABILITY INTERNAL SATA CABLE ASSEMBLY

REVISION RECORD		
REV.	ECR/ECN/ECO NUMBER	DATE
REFER TO SHT 1 OF 7		



## NOTES :

- Regulatory Information.  
RoHs compliant, See the regulatory information appendix(RIA) in the "RoHs compliance" section of WWW.3Mconnectors.com compliance information (RIA E1 & C1 apply)
- For custom cable length, contact 3M sales rep.
- Cable Part number: SL8803/04-10DN5-00
- Product Specification: PS-0117.
- This cable construction has a thin aluminum layer at each edge. User should evaluate its use in their application and, if necessary, insulating tape may be applied to cover the aluminum layer, as User deems appropriate
- PVC overmoulding and PE Inner moulding at both ends.
- Product meets SATA 3.0 signal integrity specifications.

## PART NUMBER SELECTION

5602-34-0142A-XXX  
Length in mm,000 refers to 1000mm.

3M PART NO.	L(MM)
5602-34-0142A-100	100
5602-34-0142A-200	200
5602-34-0142A-300	300
5602-34-0142A-400	400
5602-34-0142A-500	500
5602-34-0142A-600	600
5602-34-0142A-700	700
5602-34-0142A-800	800
5602-34-0142A-900	900
5602-34-0142A-000	1000

PIN OUT			
P1	TYPE	TYPE	P2
1	G	G	1
2	A+	A+	2
3	A-	A-	3
4	G	G	4
5	B-	B-	5
6	B+	B+	6
7	G	G	7

ITEM	SPECIFICATION	Q'TY	UNIT
3	CABLE : RIBBON TWIN AX , SL8803/04, UL AWM 21008,150V,80C SIGNAL -SILVER PLATED COPPER CONDUCTOR 30 AWG.	1	PC
2	SATA CONN : 7P FEMALE 90° BLACK PBT 30%GF 15*AU WITH LATCH	1	PC
1	SATA CONN : 7P FEMALE 180° BLACK PBT 30%GF 15*AU WITH LATCH	1	PC

UNIT: MM	DFTG RAD VITTAPALLI	DATE 13/07/12	<b>3M</b> APAC INNOVATION CENTRE	DIVISION	ESD	STATUS
GEN. TOLERANCES	CHKD RAD VITTAPALLI	DATE 13/07/12		MODEL		RELEASE
LINEAR .0 = ± 0.25 .00 = ± 0.15 .000 = ± 0.05	APPVL ALAN ANG	DATE 13/07/12	TITLE SATA 7 PIN RIBBON TWINAX CABLE ASSEMBLY STRAIGHT TO RIGHT ANGLE WITH LATCH			
ANGLE ±1°	THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO 3M COMPANY. NO REPRODUCTION OR PUBLICATION OF THIS DOCUMENT, IN WHOLE OR IN PART, SHALL BE MADE WITHOUT AUTHORIZATION FROM 3M. © 3M 2013. ALL RIGHTS RESERVED.		SIZE A3	DRAWING NO. 78-5100-4897-8	REV C	
PROJECTION	INTERPRET PER ASME Y14.5M-1994		SCALE : NTS	DET LIST	<input type="checkbox"/> YES <input type="checkbox"/> NO	SHT 6 of 7
	CRITICAL DIMENSION: ▲					

WWW.3Mconnectors.com

# 3M™ HIGH ROUTABILITY INTERNAL SATA CABLE ASSEMBLY

REVISION RECORD		
REV.	ECR/ECN/ECO NUMBER	DATE
REFER TO SHT 1 OF 7		



**NOTES :**

- Regulatory Information.  
RoHs compliant, See the regulatory information appendix(RIA) in the "RoHs compliance" section of [WWW.3Mconnectors.com](http://WWW.3Mconnectors.com) compliance information (RIA E1 & C1 apply)
- For custom cable length, contact 3M sales rep.
- Cable Part number: SL8803/04-10DN5-00
- Product Specification: PS-0117.
- This cable construction has a thin aluminum layer at each edge. User should evaluate its use in their application and, if necessary, insulating tape may be applied to cover the aluminum layer, as User deems appropriate
- PVC overmoulding and PE Inner moulding at both ends.
- Product meets SATA 3.0 signal integrity specifications.

**PART NUMBER SELECTION**

5602-44-0142A-XXX  
Length in mm,000 refers to 1000mm.

3M PART NO.	L(MM)
5602-44-0142A-100	100
5602-44-0142A-200	200
5602-44-0142A-300	300
5602-44-0142A-400	400
5602-44-0142A-500	500
5602-44-0142A-600	600
5602-44-0142A-700	700
5602-44-0142A-800	800
5602-44-0142A-900	900
5602-44-0142A-000	1000

PIN OUT			
P1	TYPE	TYPE	P2
1	G	G	1
2	A+	A+	2
3	A-	A-	3
4	G	G	4
5	B-	B-	5
6	B+	B+	6
7	G	G	7

ITEM	SPECIFICATION	Q'TY	UNIT
2	CABLE : RIBBON TWIN AX , SL8803/04, UL AWM 21008,150V,80C	1	PC
	SIGNAL -SILVER PLATED COPPER CONDUCTOR WITH 30 AWG.		
1	SATA CONN : 7P FEMALE 180° BLACK PBT 30GF , 15°AU WITH LATCH	2	PCS

UNIT: MM	DFTG RAD VITTAPALLI	DATE 13/07/12		DIVISION ESD	STATUS
GEN. TOLERANCES	CHKD RAD VITTAPALLI	DATE 13/07/12		MODEL	RELEASE
LINEAR .0 = ± 0.25 .00 = ± 0.15 .000 = ± 0.05	APPVL ALAN ANG	DATE 13/07/12		TITLE SATA 7 PIN RIBBON TWINAX CABLE ASSEMBLY STRAIGHT TO STRAIGHT WITH LATCH	
ANGLE ±1°	THIS DOCUMENT CONTAINS INFORMATION WHICH IS PROPRIETARY TO 3M COMPANY. NO REPRODUCTION OR PUBLICATION OF THIS DOCUMENT, IN WHOLE OR IN PART, SHALL BE MADE WITHOUT AUTHORIZATION FROM 3M. © 3M 2013. ALL RIGHTS RESERVED.		SIZE A3	DRAWING NO. 78-5100-4897-8	REV C
PROJECTION	INTERPRET PER ASME Y14.5M-1994	SCALE : NTS		DET LIST <input type="checkbox"/> YES <input type="checkbox"/> NO	SHT 7 of 7

[WWW.3Mconnectors.com](http://WWW.3Mconnectors.com)

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)