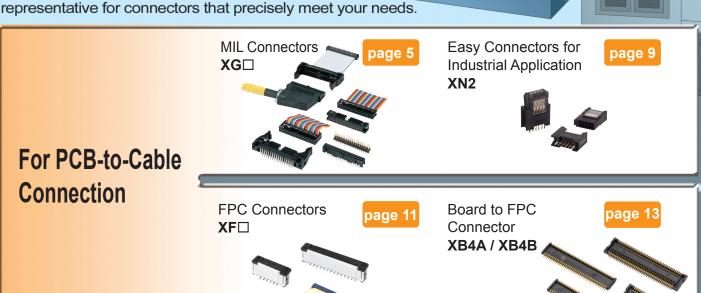


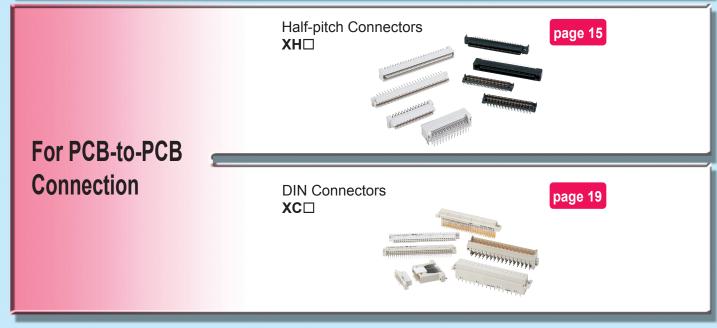


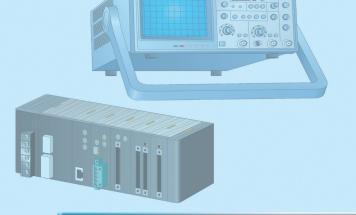
OMRON's highly reliable PCB connectors support the high-density mounting of PCB components.

These series include Half-pitch Connectors with a contact pitch of 1.27mm, Flat Cable Connectors conforming to MIL standards, D-sub/DVI/USB Connectors, and PCB

Terminal Block as well. Contact your OMRON





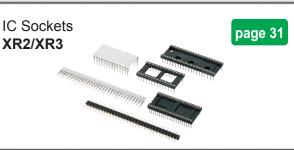






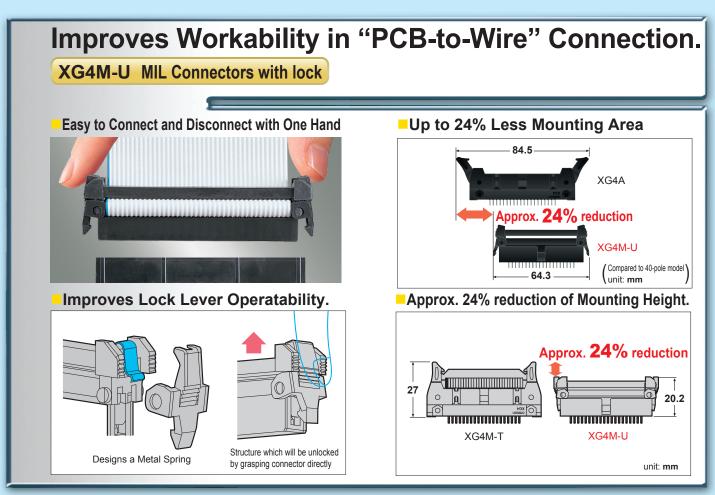


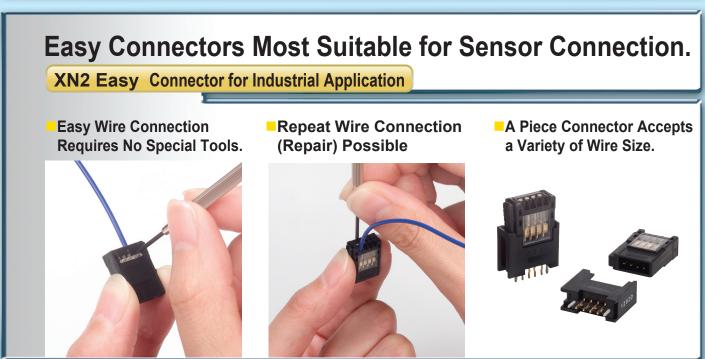
**Others** 



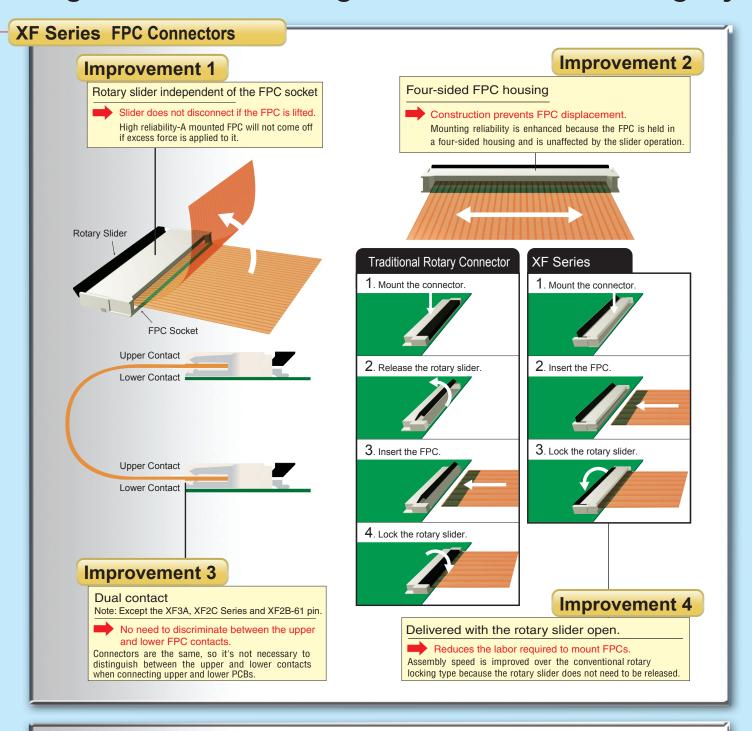
## OMRON's highly operable connectors are

"Easy-to-use" OMRON connectors Excellent operatability and workability





## designed considering on-site work throughly



### Natural Color Connector helps you to Improve Circuit Recognition.

XJ8A Jump Sockets (natural color)

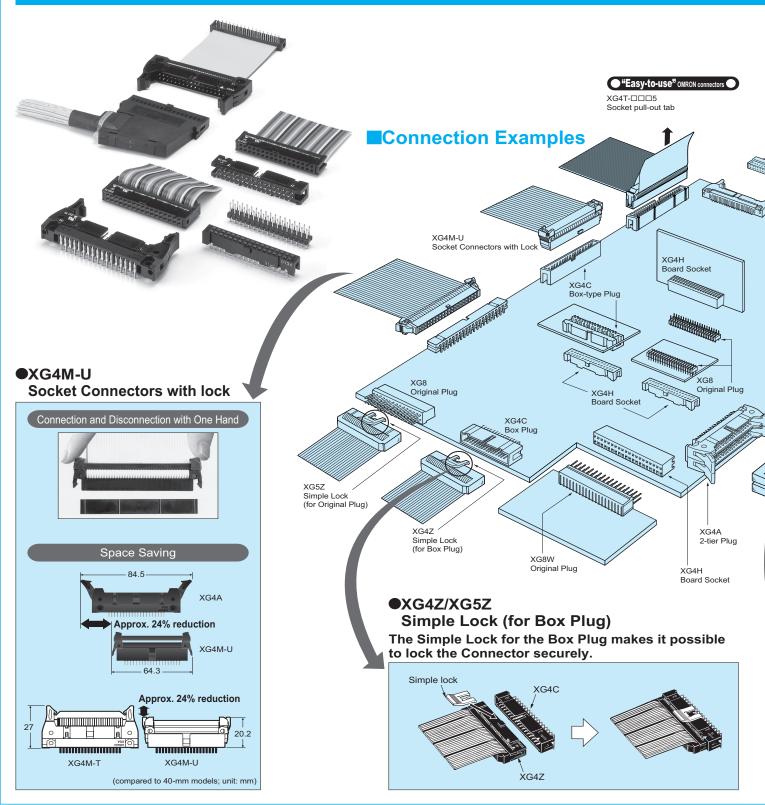
- Easy to Recognize in Inspection Process, or by Circuits.
- Remains the structure of "Easy-to-connect" and "Hard-to-disconnect".



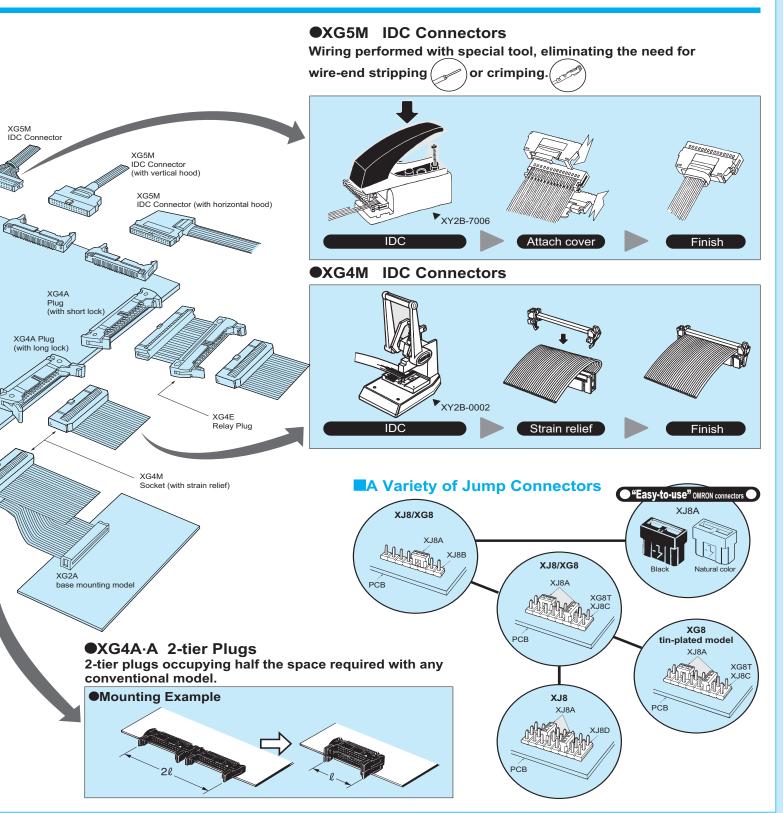
## XG and XJ8

### Flat Cable Connectors and Jump Connectors

Flat Cable Connectors Responding to a Variety of Needs for Connecting Wires to PCBs



### **IDC:Insulation Displacement Connection**



# **XG** and **XJ8**Flat Cable Connectors and Jump Connectors

#### Ordering Information

#### ●XG4M Socket connectors with lock

XG4M-□□30-U XG4M-□□31-U

	Set Model XG4M-□□30-U *1 XG4M-□□31-U *2	Socket (with open-end cover) XG4M-□□30 *1 XG4M-□□31 *2	Strain relief (with lock) XG4U-□□04
Shape			
Number of contacts	7		*
*1: 1 Polarizing guide	10,14,16,20,26,30,34,40,50,60,64	10,14,16,20,26,30,34,40,50,60,64	
*2: 2 Polarizing guide	50,60,64	50,60,64	10,14,16,20,26,30,34,40,50,60,64
*2: 0 Polarizing guide	10	10	

#### ●XG4M Socket connectors

	Set Model XG4M-□□30-T *1 XG4M-□□31-T *2	Socket (with open-end cover) XG4M-□□30 *1 XG4M-□□31 *2	Strain relief (for XG4M) XG4T-□□04
Shape			
Number of contacts			
*1: 1 Polarizing guide	10,14,16,20,26,30,34,40,50,60,64	10,14,16,20,26,30,34,40,50,60,64	
*2: 2 Polarizing guide	50,60,64	50,60,64	10,14,16,20,26,30,34,40,50,60,64
*2: 0 Polarizing guide	10	10	

#### ●XG4A Plug connectors with long lock

	Straight terminal XG4A-□□31 *1 XG4A-□□71 *2	Right angle terminal XG4A-□□34 *1 XG4A-□□74 *2				
Shape	The state of the s					
Number of contacts						
*1: 1 Polarizing guide	10,14,16,20,26,30,34,40,50,60,64	10,14,16,20,26,30,34,40,50,60,64				
*2: 2 Polarizing guide	50,60,64	50,60,64				
*2: 0 Polarizing guide	10	10				

#### ●XG4A Plug Connectors with short lock

_		
	Straight terminal XG4A-□□32 *1 XG4A-□□72 *2	Right angle terminal XG4A-□□35 *1 XG4A-□□75 *2
Shape	THE PROPERTY OF THE PARTY OF TH	
Number of contacts		
*1: 1 Polarizing guide	10,14,16,20,26,30,34,40,50,60,64	10,14,16,20,26,30,34,40,50,60,64
*2: 2 Polarizing guide	50,60,64	50,60,64
*2: 0 Polarizing guide	10	10

#### ●XG4A 2-tier Plugs with long lock

	Right angle terminal XG4A-□□39-A *1 XG4A-□□79-A *2
Shape	O LULLILLIAN O
Number of contacts	
*1: 1 Polarizing guide	10,14,16,20,26,30,34,40,50,60,64
*2: 2 Polarizing guide	50,60,64
*2: 0 Polarizing guide	10

#### ●XG4A Plugs without lock lever

Shape	Straight terminal XG4A-□□33 *1 XG4A-□□73 *2	Right angle terminal XG4A-□□36 *1 XG4A-□□76 *2	
Number of contacts			
*1: 1 Polarizing guide	10,14,16,20,26,30,34,40,50,60,64	10,14,16,20,26,30,34,40,50,60,64	
*2: 2 Polarizing guide	50,60,64	50,60,64	
*2: 0 Polarizing guide	10	10	

#### ●XG4E Relay plug connectors

, pg						
	Long lock XG4E-□□31 *1 XG4E-□□71 *2	Short lock XG4E-□□32 *1 XG4E-□□72 *2	Strain relief (for XG4E) XG4S-□□04			
Shape  Number of contacts	The state of the s	Marie Manager				
*1: Polarizing guide 1	10,14,16,20,26,30,34,40,50,60,64	10,14,16,20,26,30,34,40,50,60,64				
*2: Polarizing guide 2	50,60,64	50,60,64	10,14,16,20,26,30,34,40,50,60,64			
*2: Polarizing guide 0	10	10				

#### ●XG4C Box type plug connectors

3,1 1, 1, 3							
	Straight terminal XG4C-□□31 *1 XG4C-□□71 *2	Right angle terminal XG4C-□□34 *1 XG4C-□□74 *2					
Shape	The transfer of the state of th						
Number of contacts							
*1: 1 Polarizing guide	10,14,16,20,26,30,34,40,50,60,64	10,14,16,20,26,30,34,40,50,60,64					
*2: 2 Polarizing guide	50,60,64	50,60,64					
*2: 0 Polarizing guide	10	10					

#### ●XG4H Socket for board to board conectors

	Straight terminal XG4H-□□31 *1 XG4H-□□71 *2	Right angle terminal XG4H-4034
Shape	The state of the s	
Number of contacts	* 11*	
*1: 1 Polarizing guide	10,14,16,20,26,30,34,40,50,60,64	40
*2: 2 Polarizing guide	50,60,64	_

#### ●XG8/XJ8 Jump connectors

	XG8S-□□31 XG8S-□□41	XG8T-□□31 XG8T-□□41	XJ8B-□□11	XJ8C-□□11	XJ8D-□□11	XJ8A-0211 XJ8A-0241 XJ8A-0214
Shape			<b>HILLIN</b>			
Number of contacts	2,3,4,6,8,16,18	2,4,6,8,10,12,14,16,18,20	2,3,4,6,8,16	2,3,4,6,8,10,12,14,16	3,6,9,12,15,18,21,24	2

#### ●XG8 Original plugs

PAGE Original plugs						
	1-Row type Straight terminal XG8A-5031	1-Row type Right angle terminal XG8A-5034	2-Row type Straight terminal XG8B-0131	2-Row type Right angle terminal XG8B-0134	Straight terminal XG8W-□□31(Au) XG8W-□□41(Sn)	Right angle terminal XG8W-□□34(Au) XG8W-□□44(Sn)
Shape					14400000000000000000000000000000000000	
Number of contacts	50	50	100	100	10,14,16,20,26,30,34,40,50,60	20,26,30,34,40,50

## **XN2**Easy Connectors for Industrial Application

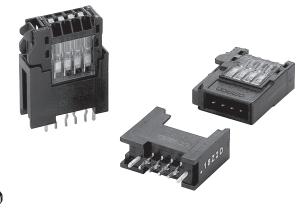
## Easy-wire Connectors With $\ell$ - $CON^*$ Specifications, Ideal for connecting Sensors

- Use industry— proven spring clamps for wiring.
- Rewiring (reparing) is possible.
- Each connector accepts any wire size from AWG28 (0.08 mm²) to AWG20 (0.5mm²).

(External sheath diameter: 1.5mm max).

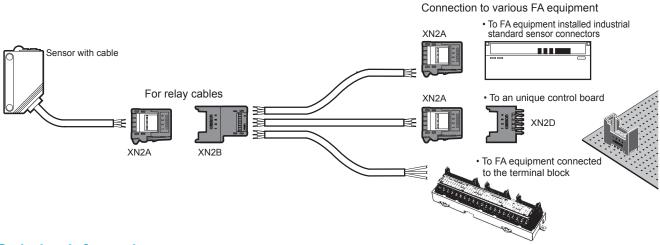
No special tools required for easy wiring





\*  $\it{\ell\text{-}CON}$  Specifications are currently being promoted for Standardization by manufacturers of FA Components and Connections.

#### **■**Example of Wiring Form

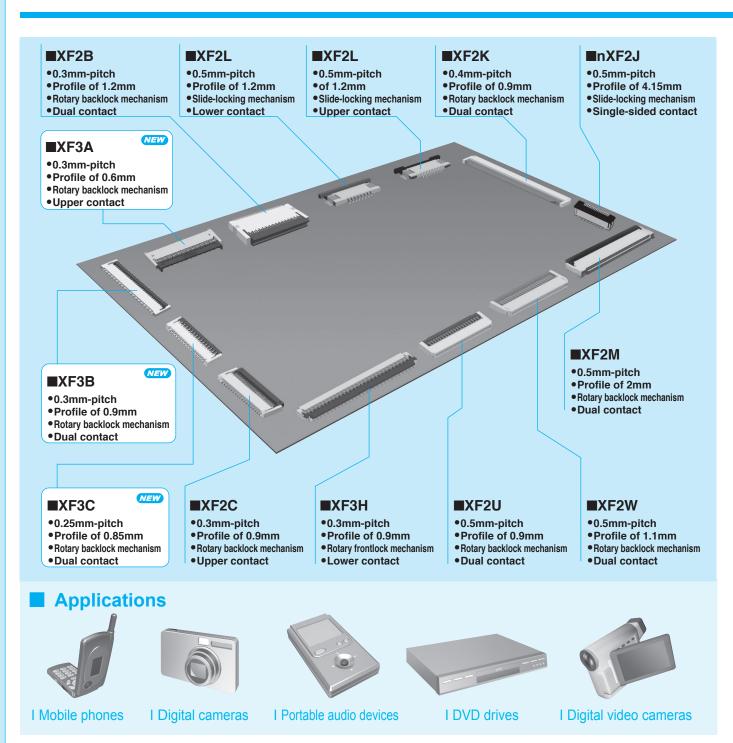


#### **■**Ordering Information

Туре	Cable Plug Connector	Cable Socket Connector	Single-socket PCB Socket Connector	Four-socket PCB Socket Connector
Appearance				
No. of contacts	Model	Model	Model	Model
3	XN2A-1370		XN2D-1371	
4	XN2A-1470	XN2B-1470	XN2D-1471	XN2D-4471
5	XN2A-1570		XN2D-1571	
6	XN2A-1670		XN2D-1671	
8	XN2A-1870		XN2D-1871	

# XF Series FPC Connectors

FPC Connectors must offer easy operation and secure mounting in tight working spaces. The rotary backlock construction of the XF Series solves FPC mounting problems and significantly enhances work efficiency and reliability.



#### **■ Product Overview**

Model	Lock mechanism	Pitch	On-board height	Depth (*4)	Applicable FPC thickness	Contact type
XF3C XF3C	Rotary backlock	0.25mm	0.85mm	3.8mm	0.12mm	Dual contact
XF3A	Rotary backlock	0.3mm	0.6mm	3.8mm	0.12mm	Upper contact
XF3B	Rotary backlock	0.3mm	0.9mm	4.0mm*3	0.2mm	Dual contact
XF2C	Rotary backlock	0.3mm	0.9mm	4.0mm	0.12mm	Upper contact
XF2B	Rotary backlock	0.3mm	1.2mm	5.5mm	0.2mm	Dual contact*1
XF3H	Rotary frontlock	0.3mm	0.9mm	3.5mm	0.2mm	Lower contact
XF2K	Rotary backlock	0.4mm	0.9mm	4.0mm	0.2mm	Dual contact
XF2U XF2U	Rotary backlock	0.5mm	0.9mm	3.5mm	0.2mm	Dual contact
XF2W	Rotary backlock	0.5mm	1.1mm	3.5mm*3	0.3mm	Dual contact
XF2M	Rotary backlock	0.5mm	2.0mm*2	5.9mm*2	0.3mm	Dual contact
XF2L	Slide lock	0.5mm	1.2mm	3.45mm	0.3mm	Upper/lower contact
XF2J	Slide lock	0.5mm	4.15mm	3.4mm	0.3mm	Single-sided contact

<sup>\*1:</sup> Models with 61 pins have upper contacts. \*2: 55 and 60 pins are different specifications. \*3: Dimensions differ for the long-lock type. 
\*4: These are latch closed dimension.

#### **■ Model Number Legend**



- (1) Classification in Series 2B, 2C, 2J, 2K, 2L, 2M, 2U, 2W, 3A, 3B, 3C,
- (2) Number of Signal Contact Pins
- (3) Signal Contact Arrangement
  - 1: One-row, double-sided contact 2: One-row, single-sided contact (including upper contact and top entry)
  - 3: One-row, single-sided contact (lower contact)
- 4: Two-row, double-sided contact
- 5: Two-row, single-sided
- (4) Terminal Shape 4: SMT terminals
  - (top entry) 5: SMT terminals
- (side entry) (5) Applicable FPC thickness 1: 0.3mm
  - 3: 0.2mm

- 4: 0.12mm 5: 0.15mm
- (6) Terminal Arrangement □: Standard
  - 1: Staggered arrangement (forward arrangement)
  - 2: Staggered arrangement (backward arrangement)
  - (7) Plating A: Au
  - (8) Special Correspondence
    - E: Easy lock type H: For multiple pins

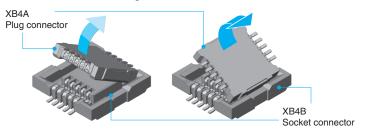
- (7) Plating A: Au
- (8) Special Correspondence E: Easy lock type
  - H: For multiple pins

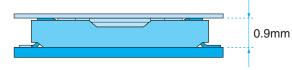
## XB4A/B 0.4mm Pitch Board to FPC Connectors

Ultra-low profile connector with a stacking height of 0.9mm, guarantees easy operation and high contact reliablity.

- The low-profile shape, a sharp "click" and a high retention force
- Possible to remove any direction
- Easy insertion performance by self-alignment
- Double contacts ensure highly reliable contact
- Twist-resistant design allows removal in all directions







- Featuring the self-alignment structure
- Double contacts ensure highly reliable contact



#### **■ Product Overview**

Model	Part name	Pitch	Stacking height	Width
XB4A	Plug		0.0	4.1mm
XB4B	Socket	0.4mm	0.9mm	5.0mm

**Model Number Legend** \* Use this legend when determining the product specifications from the model number. Choose from the model numbers listed in this catalog when ordering.

XB4 = 35 - D(1) (2) (3) (4)(5) (6)

(1) (2) (3) ( (1) Series Name 0.4-mm Pitch Board to

FPC Connector

(2) Classification in Series A: Plug

B: Socket

(3) Number of Signal Contact Pins

(4) Plating 3: Au

(5) Terminal Shape SMT terminals (6) Accessories
D: Without boss and hold down

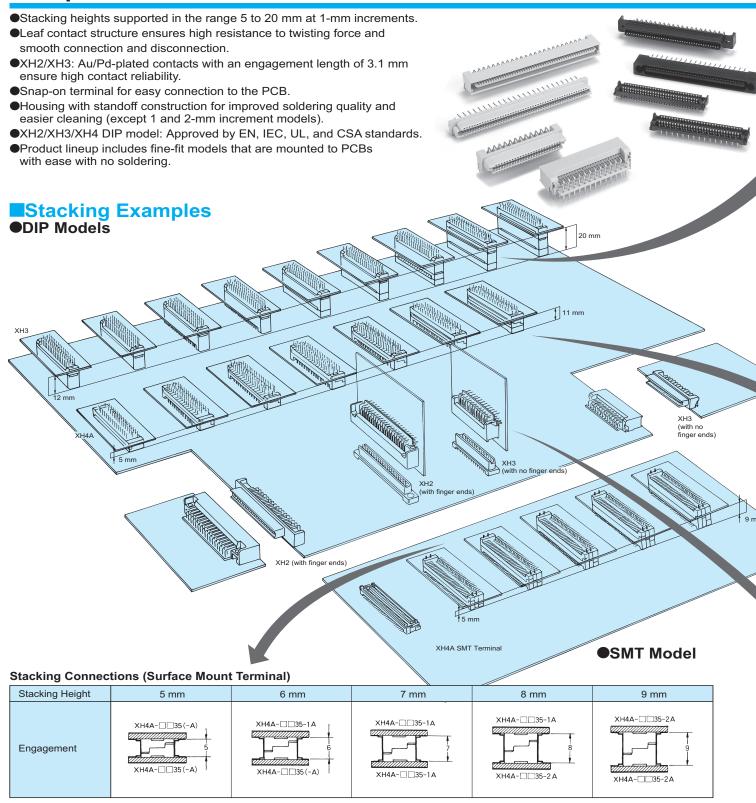
#### ■ Ordering Information

Туре	Pin No.	Quantity per reel (See Note 1)	Model
Plug	24	3,000	XB4A-2435-D
	40	3,000	XB4A-4035-D
	80	3,000	XB4A-8035-D
Socket	24	3,000	XB4B-2435-D
	40	3,000	XB4B-4035-D
	80	3,000	XB4B-8035-D

Note: 1. Please order a multiple of the quantity per reel.

## XH3/XH4/XH2 Half-pitch Connectors Series

## 1.27-mm Contact Pitch Greatly Contributing to High-density Mounting of Electronic Components and Miniaturization of Electronic Devices



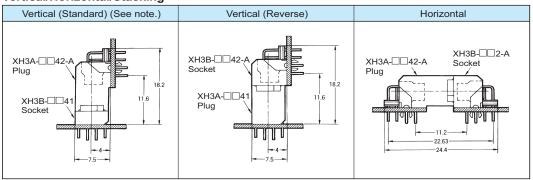
### **Engagement**Stacking Connections

Stacking Height	12 mm	13 mm	14 mm	15 mm	16 mm
Engagement	XH3B	XH3B- 41-1A -7 13 13 -7 XH3A- 41 (-A)	XH3B	XH3B	XH3B
Stacking Height	17 mm	18 mm	19 mm	20 mm	
Engagement	XH3B	XH3B	XH3B41-3A -7 19 19 XH3A41-4A	XH3B	

#### Stacking Connections (Straight Terminal)

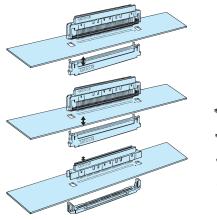
tacking Connections (Straight Terminal)						
Stacking Height	5 mm	6 mm	7 mm	8 mm		
Engagement	XH4A-□□31 (-A)  5.0  XH4A-□□31 (-A)	XH4A31 (-A) 6.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	XH4A-\( \text{\tint{\text{\tint{\text{\text{\text{\tint{\text{\text{\text{\text{\text{\text{\text{\text{\tint{\text{\text{\text{\text{\text{\text{\text{\text{\tinit}\xi}\\ \text{\tinit}\\ \tint{\text{\text{\tinit}}\\ \text{\text{\text{\ticl{\text{\tex{\tex	XH4A-  31-1A 		
Stacking Height	9 mm	10 mm	11 mm			
Engagement	XH4A-□□31-2A 9,0 9,0 XH4A-□□31-2A	XH4A-\( \) 31-2A	XH4A-[]31-3A  11.0  11.0  VIUI  XH4A-[]31-3A			

#### Vertical/Horizontal/Stacking



### XH3/XH4/XH2 **Half-pitch Connectors Series**

■ Connection Examples
■ Multi-tier Stacking of Fine-fit Models





16.8

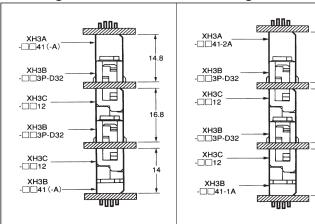
#### •Fine Fit

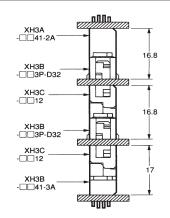
The term " fine fit " (generally known as " press fit " ) refers to the technique where the connector terminal are pressed into the through holes of the PCB to connect the PCB and connector electrically and mechanically with the spring pressure of the terminal.

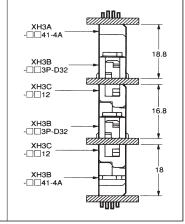
The connector is connected with no solder, eliminating the soldering stage usually required with connectors. Furthermore the PCB is free of thermal load or flux, thus contributing to cost reductions and improvements in contact reliability.

#### Engagement

Stacking Fine-fit Plain Models with Straight Terminal







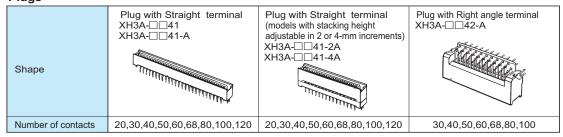
#### Ordering Information

●XH3 Half-pitch Connectors (Fine-fit and Stacking Connection)

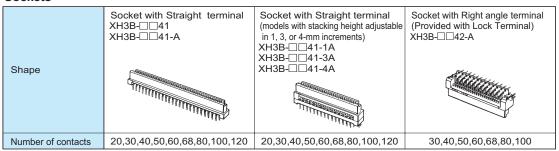
The fruit piton connectors (i me in and clacking connection)						
	Socket (Backplane Model) XH3B-013P-D32	Housing (Backplane Model) XH3C-0112	Set model XH3B-013P-D32-C			
Shape						
Number of contacts	100	100	100			

·	XH3B-013P-D5F	XH3S-0111	XH3B-013P-D5F-S
Shape			THE
Number of contacts	100	100	100

### ●XH3 Half-pitch Connectors (Board-to-Board Connection) Plugs



#### **Sockets**

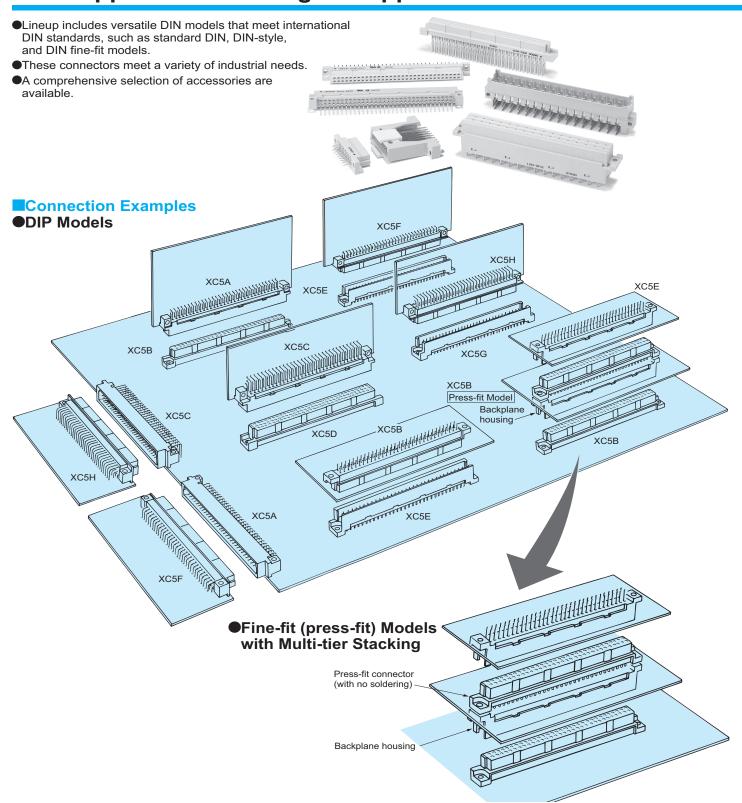


#### ●XH4 Half-pitch Connectors (Low-profile Stacking Connection)

Shape	Half-pitch Connector with Straight terminal XH4A-□□31	Half-pitch Connector with Straight terminal (models other than standard models with stacking height adjustable in 1, 2, or 3-mm increments) XH4A-□□31-A XH4A-□□31-1A XH4A-□□31-2A XH4A-□□31-3A	Half-pitch Connector with SMT (models other than standard models with stacking height adjustable in 1 or 2-mm increments)  XH4A-□□35-A  XH4A-□□35-1A  XH4A-□□35-2A
Number of contacts	40,50,60,80,100	40,50,60,80,100	40,50,60,80,100

## XC5/XC6/XC7/XC2/XC4 DIN Connectors Series

A Wide Variety of High-density Connectors Conform to International Standards, are Highly Reliable, and Support a Wide Range of Applications



### ■ A wide variety of DIN connectors are available in addition to the following models.

XC5 DIN-style Connectors

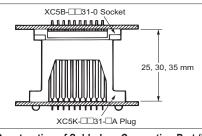


	Standard DIN	DIN style 1	DIN style 2
PCB mounting	Fixed at PCB edge	PCB surface mounting	PCB surface mounting

 Designed for PCB surface mounting and ideal for automatic soldering.

XC5K High-profile Stacking Connectors





 Corresponding to a stacking height of 25, 30, or 35 mm.

XC5 Fine-fit (press-fit) Connectors





Construction of Solderless Connecting Part (Fine-fit Part)

The cross section is in the shape of the letter W.
The two points on the bottom

work as guide rails, preventing the pins from becoming twisted. The fin parts on the upper part change shape to fit into the through hole of the PCB.

- Press-fitted to PCBs and so soldering or cleaning is required.
- Mounting method more efficient than manual soldering.
- Ideal for backplane systems.

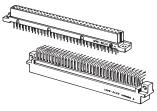
XC5M DIN Connectors in 4 Lines with 128 Connector Poles

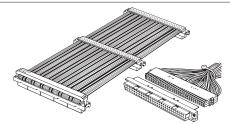


	XC5M standard	XC5M-1	XC5N
	DIN model	DIN style 1	DIN style 3
	Plug	Plug	Socket
	Right angle	Right angle	Straight
	terminal	terminal	terminal
Shape			

 Multi-pole connectors in 4 lines with 128 poles based on the DIN concept.

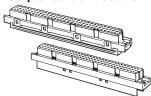


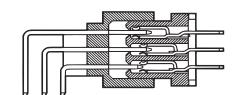




- Ideal for connecting to a variety of bus lines for rack systems.
- Allow backplanes to be constructed with ease.
- Models with 96 connector poles and models with 64 connector poles and a center-holed construction are available.

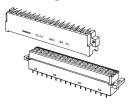
**XC7 Sequence Connectors** 

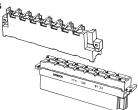


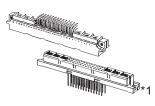


- Active lines can be connected to daughter boards after connecting power lines, and can be disconnected before disconnecting the power lines.
- High reliability ensured with an engagement length of 4 mm and the durability to withstand 5,000 insertions.
- Three-step sequential operation.

**XC4 Mid- and High-current Connectors** 







 Carry 6 to 40 A for PCB-to-PCB or PCB-to-wire applications.

\*1(high frequency model available)

## XC5/XC6/XC7/XC2/XC4 DIN Connectors Series

### **■**Ordering Information

#### ●XC5 DIN Connectors

	XC5A 2-Row Plugs (DIN-B Standard Models)	XC5B 2-Row Sockets (I	DIN-B Standard Models)	XC5E DIP Plugs (DI	N-Q Reverse Models)
Shape	Right angle terminal XC5A-□□22	Straight terminal XC5B-□□21	Straight wrapping terminal XC5B-□23	Straight terminal XC5E21	Straight wrapping terminal XC5E-□23
Number of contacts	20,32,44,50,64,100	20,32,44,	50,64,100	20,32,44,	50,64,100

	XC5F 2-Row Sockets (DIN-Q Reverse Models)	XC5C 3-Row Plugs (DIN-C Standard Models)	XC5D 3-Row Sockets (I	DIN-C Standard Models)
Shape	Right angle terminal XC5F-□□22	Right angle terminal XC5C-□□22	Straight terminal XC5D-□□21	Straight wrapping terminal XC5D-□□23
Number of contacts	20,32,44,50,64,100	32,48,64,96	32,48,64,96	

	XC5G 3-Row Plugs (E	XC5H 3-Row Sockets (DIN-R Reverse Models)	
	Straight terminal XC5G-□□21	Straight wrapping terminal XC5G-□□23	Right angle terminal XC5H-□□22
Shape	THE RESIDENCE OF THE PARTY OF T		
Number of contacts	48,6	48,64,96	

#### ●XC5 DIN-style Connectors

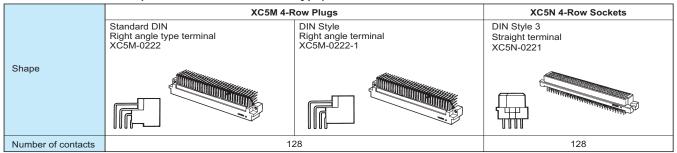
	XC5A 2-Row Plugs (DIN Style 1)	XC5B 2-Row Sockets (DIN-style Compatible Models)	XC5E 2-Row Plugs (DIN Style 2)	XC5F 2-Row Sockets (DIN Style 2)
Shape	Right angle terminal XC5A-□ 82-1	Straight terminal XC5B31-0(with coding key) XC5B31-3	Straight terminal XC5E-□□81-2 XC5E-□□81-3 *	Right angle terminal XC5F-□□32-2
Number of contacts	20,24,30,32,44,50,64,100	10,14,16,20,24,30,32,44,50,64,100	10*,14*,20,24*,30,32,44,50,64,100	20,30,32,44,50,64,100

	XC5K High-profile Stacking Plugs	XC5C 3-Row Plugs (DIN Style 1)	XC5D 3-Row Sockets (DIN Style Compatible)
Shape	XC5K-□31-3A with 30-mm-pitch Straight terminal XC5K-□31-2A with 25-mm-pitch Straight terminal		Straight terminal XC5D-□□31-0
			THE PROPERTY OF THE PARTY OF TH
Number of contacts	16,20,32	64,96	64,96

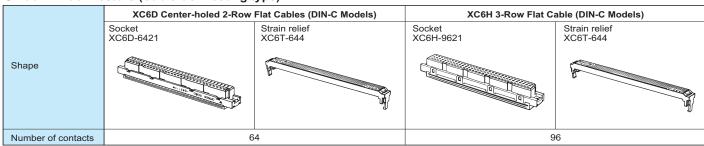
#### ●XC5 DIN Connectors (Fine-fit, W-shaped terminal type)

	XC5B 2-Row Sockets	XC5E 2-Row Plugs	XC5D 3-Row Sockets	XC5G 3-Row Plugs
	(DIN-B Fine-fit, W-terminal Models)	(DIN-Q Fine-fit, W-terminal Models)	(DIN-C Fine-fit, W-terminal Models)	(DIN-R Fine-fit, W-terminal Models)
Shape	Straight terminal	Straight terminal	Straight terminal	Straight terminal
	XC5B-□□2P-1140 *1	XC5E-□□2P-1140 *1	XC5D-□□2P-1140 *1	XC5G-□□2P-1140 *1
	XC5B-□□2P-1131 *2	XC5E-□□2P-1131 *2	XC5D-□□2P-1131 *2	XC5G-□□2P-1131 *2
	XC5B-□□2P-1132 *3	XC5E-□□2P-1132 *3	XC5D-□□2P-1132 *3	XC5G-□□2P-1132 *3
Number of contacts	32,64,100	32,64,100	48,64,96	48,64,96

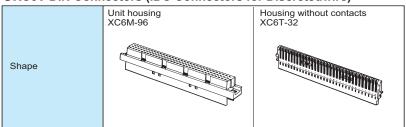
#### ●XC5 DIN Connectors (4-Rows and 128 Contacts type)



#### ●XC6 DIN Connectors (Cable Connecting type)



#### ●XC6V DIN Connectors (IDC Connectors for Discretedwire)



## XC5/XC6/XC7/XC2/XC4 DIN Connectors Series

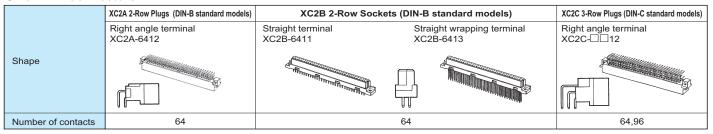
#### **■**Ordering Information

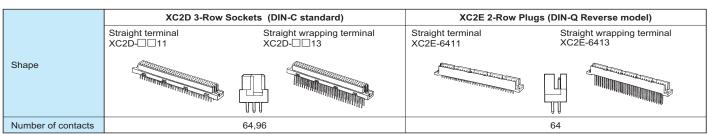
#### ●XC7 DIN Socket Sequence Connectors

	XC7A 2-Row Plugs	XC7B 2-Row Sockets	XC7C 3-Row Plugs	XC7D 3-Row Sockets
Shape	Right angle terminal XC7A-□□42-N001 *1	Straight terminal XC7B-□41-N001 *1 XC7B-□41-N003 *2	Right angle terminal XC7C-9642-N001 *1	Straight terminal XC7D-9641-N001 *1
Number of contacts	64,90,100	64,90,100	96	96

<sup>\*1:</sup>N001→Normal \*2:N003→Sequence

#### XC2 DIN Connectors





	XC2F 2-Row Sockets (DIN-Q Reverse model)	XC2G 3-Row Plu	ıgs (DIN-R Reverse model)	XC2H 3-Row Sockets (DIN-R Reverse model)
	Right angle terminal XC2F-6412	Straight terminal XC2G-□□11	Straight wrapping terminal XC2G-□□13	Right angle terminal XC2H-□□12
Shape		The transmitted of the state of		
Number of contacts	64		64,96	64,96

#### XC4 DIN types

Models	XC4G/H	XC4E/F	XC4A/B	XC4K/L	XC4M/N
DIN	D	E	F	Н	M
Shape		o c		> <sub>0</sub>	

#### ●XC4 DIN Connectors (Medium and High-current Connectors)

	XC4A Plugs (DIN-F)	XC4B Soc	kets (DIN-F)
	Right angle terminal XC4A-4812	Straight terminal XC4B-4813	Wrapping terminal XC4B-4811
Shape			
Number of contacts	48	48	

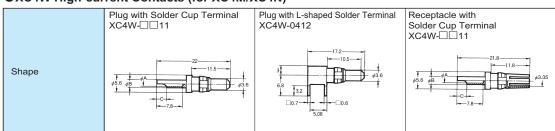
	XC4E Plugs (DIN-E)	XC4F Sockets (DIN-E)	XC4G Plugs (DIN-D)	XC4H Sockets (DIN-D)
	Right angle terminal XC4E-□□12	Wrapping terminal XC4F-□□13	Right angle terminal XC4G-3212	Wrapping terminal XC4H-3213
Shape				
Number of contacts	32,48	32,48	32	32

	XC4K Plugs (DIN-H)	XC4L Sockets (DIN-H)	XC4L Sockets(with Fastening Terminals)(DIN-H)
	Right angle terminal XC4K-1542	Straight terminal XC4L-1541	with Fasten Terminal XC4L-1546
Shape			
Number of contacts	15	15	15

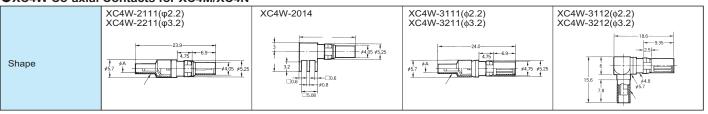
	XC4M Plugs (DIN-M)	XC4N Sockets (DIN-M)
	Right angle terminal XC4M-□□12	Straight wrapping terminal XC4N-□□13
Shape		
Number of contacts	2/78, 4/60, 6/42 *	2/78, 4/60, 6/42 *

<sup>\*:</sup> contacts/ Number of signal circuit poles

#### ●XC4W High-current Contacts (for XC4M/XC4N)



#### ●XC4W Co-axial Contacts for XC4M/XC4N



### **DVI Connectors** XM4M

## OMRON DVI Connectors, Conforming to Digital Visual Interface (DVI) Standards, Transmit High-resolution Video Signals.

- Support not only the Transition Minimized Differential Signaling (TMDS), but also the conventional analog RGB transmission simultaneously.
- ■OMRON DVI connectors provide a bandwidth performance of maximum 2.5 GHz over analog interface.
- ■Support high bandwidth data transfer of maximum 9.9Gbps over digital dual link, addressing the bandwidth requirements of the next generation broadband.
- ■EMI shield indispensable to high-speed data transfer is fully prepared.
- ■Two types, digital and digital/analog sharing types, are available.



#### **% Ordering Information**

Туре	Digital type		Digital/analog	sharing type
Accessories	Without Anchor	Inch screw (5.8 mm)	Without Anchor	Inch screw (5.8 mm)
Series	XM4M-2432-5012	XM4M-2432-1312	XM4M-2932-5012	XM4M-2932-1312
Shape				

### **USB Connectors XM7**

## **New Compact Interface Connectors Conforming to USB Standards**

- ■Allows connecting or disconnecting of active lines with power supplied to devices
- ■Structure of high resistance to twisting force during connecting or disconnecting
- Socket model A is for personal computers and USB hubs while socket model B is for peripheral devices, such as the modem, scanner, or mouse of a personal computer.







#### **%** Ordering Information

#### ■Sockets

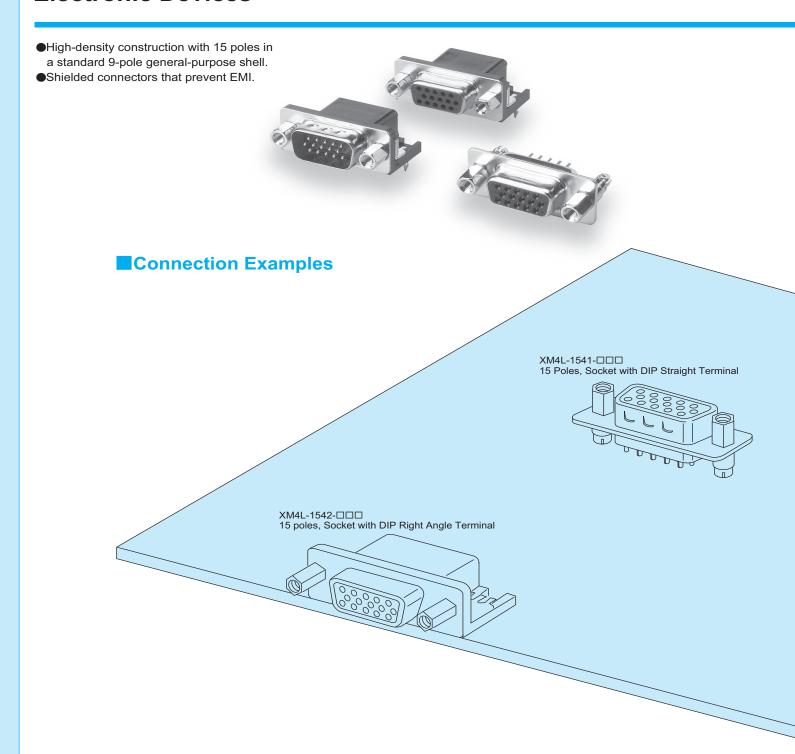
Item	Туре	A type with 1-tier	vith 1-tier A type with 2-tier B		
Shape		DIP Right Angle Terminal with kink terminal	DIP Right Angle Terminal with kink terminal	DIP Right Angle Terminal with kink terminal	
Series		XM7A-0442	XM7A-0442-A	XM7B-0442	

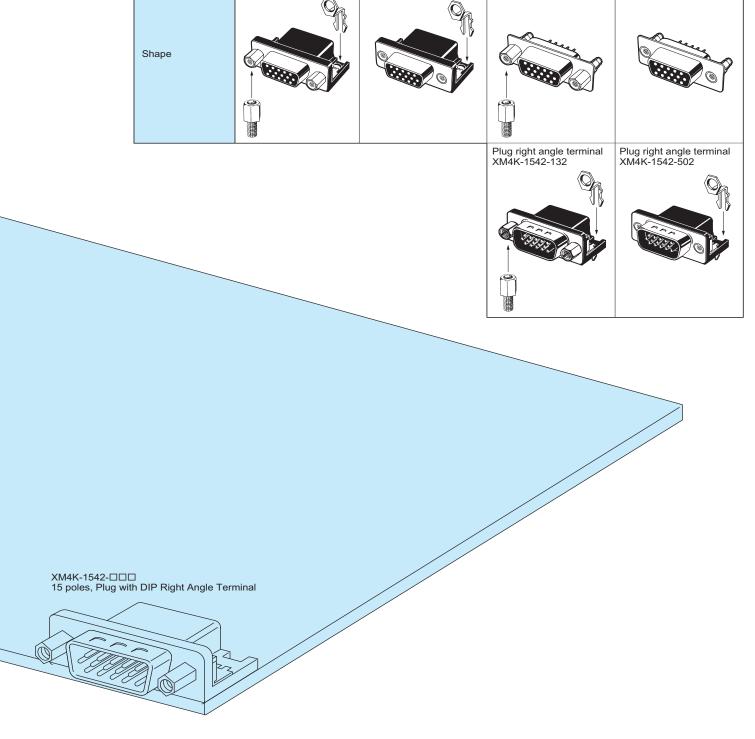
#### **■**Dust Covers

-Dust covers				
Item Typ	e For A type	For B type		
Shape				
Series	XM7Z-0001	XM7Z-0002		

### XM4K/L High-density D-sub Connectors

## **High-density Connectors Ideal for Interfacing with Electronic Devices**





Socket right angle terminal XM4L-1542-502

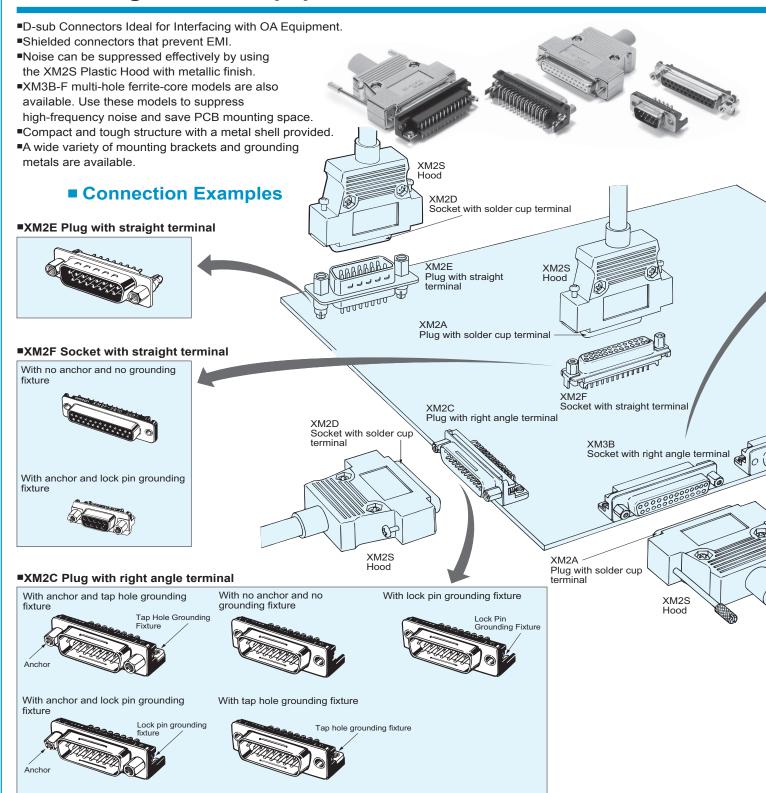
Socket straight terminal XM4L-1541-132

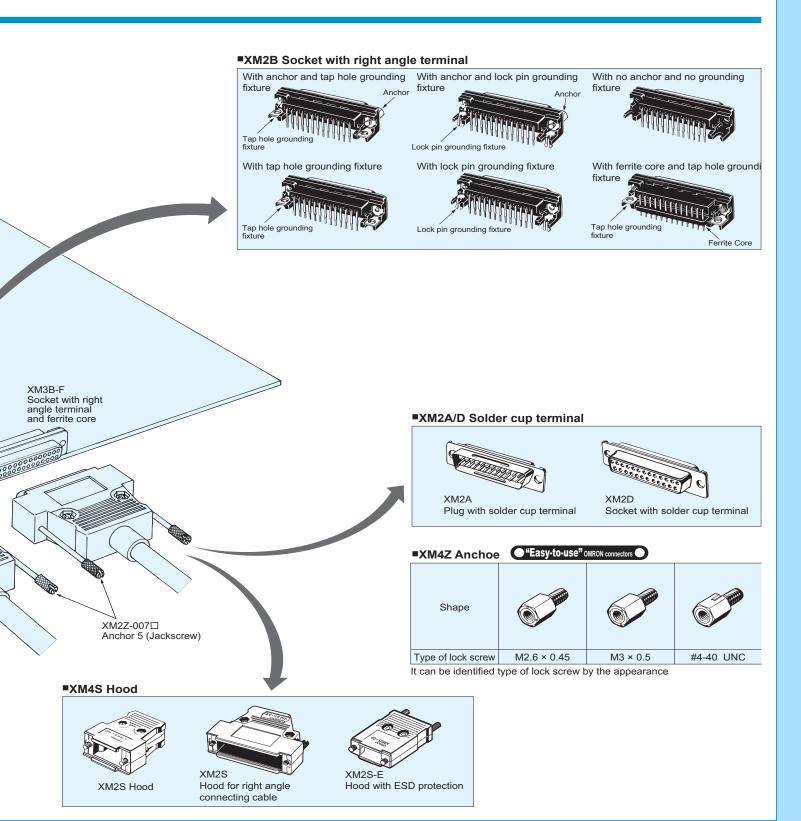
Socket straight terminal XM4L-1541-502

Socket right angle terminal XM4L-1542-132

## XM2/XM3 D-sub Connectors

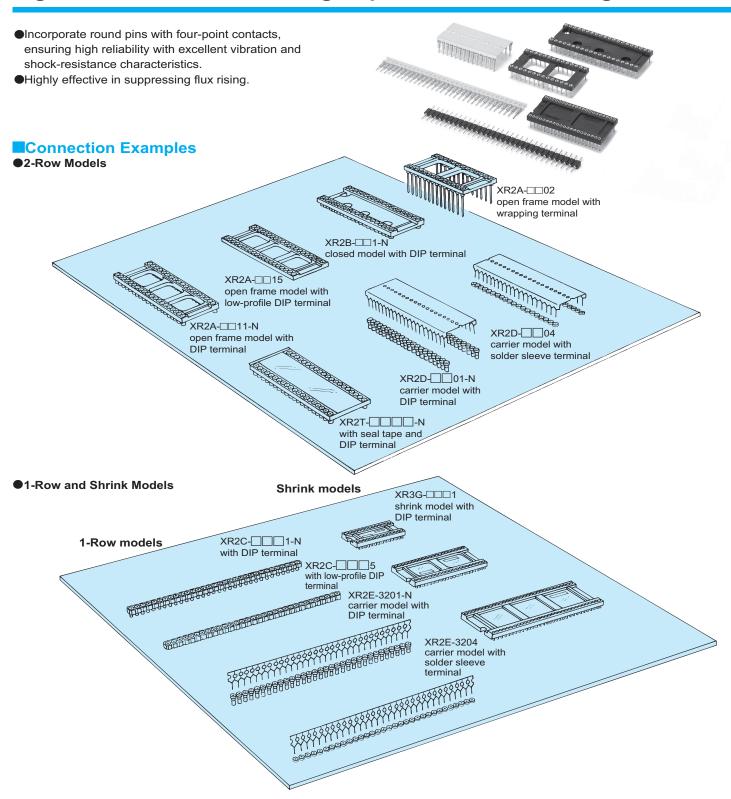
#### D-sub Connectors Ideal for Interfacing with OA Equipment

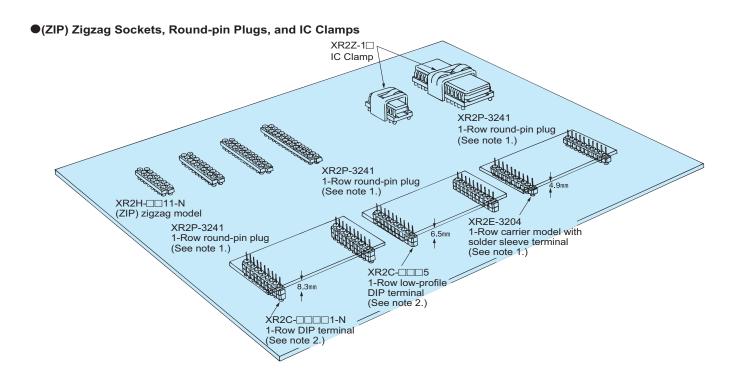






## **Highly Reliable Sockets That Withstand Instantaneous Signal Failures - Ideal for High-speed Data Processing Circuits**

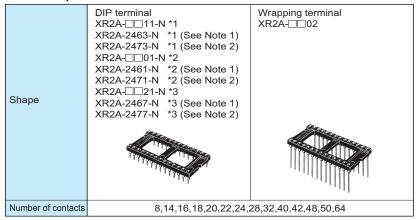




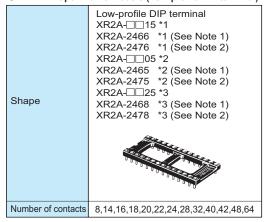
# XR2/XR3 IC Sockets

#### Ordering Information

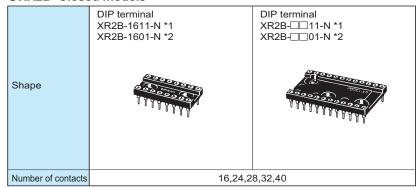
#### ●XR2A Open frame models



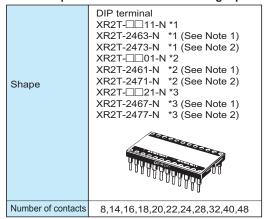
#### ● XR2A Open frame models (Low-profile DIP terminal)



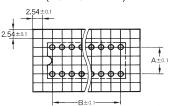
#### ●XR2B Closed models



#### ●XR2T Open frame models with sealing tape



### Foot Pattern on PCB Board (BOTTOM VIEW)



#### **Dimension Table**

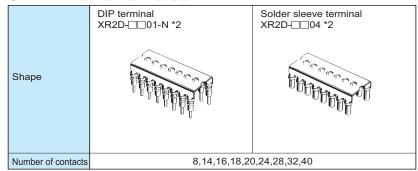
Number of contacts	Pitch (mm)	Α	В
8		7.62	7.62
14		7.62	15.24
16		7.62	17.78
18		7.62	20.32
20		7.62	22.86
22		10.16	25.40
24		15.24	27.94
24*		10.16	27.94
24**		7.62	27.94
28		15.24	33.02
32		15.24	38.10
40		15.24	48.26
42		15.24	50.80
48		15.24	58.42
50		22.86	60.96
64		22.86	78.74

Note 1: Please refer to 24\* in Dimension Table. Note 2: Please refer to 24\*\* in Dimension Table.

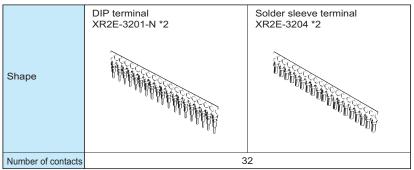
#### ●XR2C 1-Row Connectors

OXINZO I NON COMMICCION			
Shape	DIP terminal XR2C-□11-N *1 XR2C-□01-N *2 XR2C-□21-N *3	Low-profile DIP terminal XR2C-□15 *1 XR2C-□05 *2 XR2C-□25 *3	Wrapping terminal XR2C-□□02 *2
Number of contacts	10,16,20,32	20,32	20,32

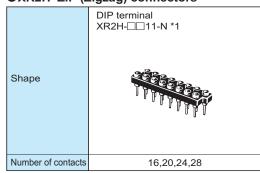
#### ●XR2D 2-Row carrier models



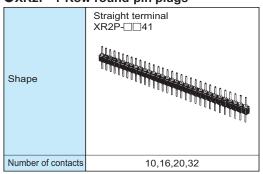
#### ●XR2E 1-Row carrier models



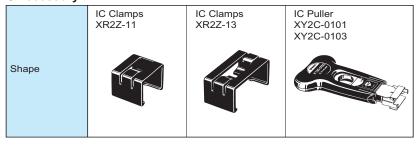
#### ●XR2H ZIP (Zigzag) connectors



#### ●XR2P 1-Row round-pin plugs



#### •Accessory



## **Safety Standard**

#### ■UL(Underwriters Laboratories Inc.)

**12.** (4): **12.** (4)

#### ● Connectors

Model	Number of contacts	Rating	Standard No.	File No.
XH2A XH2B	20,30,40,50,60,68,80,100			
XH3A XH3B	20,30,40,50,60,68,80,100,120	0.5A AC 125V	UL1950	E103202
XH4A	40,60,80,100 (not including SMT pins)			
XC5A	20,32,44,50,64,100			
XC5B	20,32,44,50,64,100			
XC5C XC5D	32,48,64,96			
XC5E	20,32,44,50,64,100	2A AC 300V		
XC5F	20,32,44,50,64,100	271716 300 1		
XC5G XC5H	48,64,96			
XG4A XG4C	10,14,16,20,26,30,34,40,50, 60,64	3A AC 300V	_	
XG4S XG4T	10,14,16,20,26,30,34,40,50, 60,64	- 1A AC 250V		
XG4E XG4M	10,14,16,20,26,30,34,40,50, 60,64	- TA AC 250 V		
XG5M	10,14,16,20,26,30,34,40,50,60,64	3A max. AC 300V		
XJ8A	02		UL478	E103202
XJ8B	02,03,04,05,06,07,08,09,10,11 12,13,14,15,16	24 4 G 2007/		
XJ8C	02,04,06,08,10,12,14,16	2A AC 300V		
XJ8D	03,06,09,12,15,18,21,24			
XM3B	09,15,25,37	5A AC 300V		
XR2A	08,14,16,18,20,22,24,28,32,40 42,48,50,64			
XR2B	16,24,28,40	-		
XR2C	03,04,05,06,07,08,09,10,11, 12,13,14,15,16,18,20,21,22, 23,24,26,28,30,32,64	1A AC 300V		
XR2D	08,14,16,18,20,24,28,32,40			
XR2E	02,04,08,30,32			
XR2T	08,14,16,18,20,22,24,28,32, 40,48			

## ■CSA(Canadian Standards Association) ⑥



#### Connectors

Model	Number of contacts	Rating	File No.	
XC5A	20,32,44,50,64,100			
XC5B	20,32,44,50,64,100			
XC5C,XC5D	32,48,64,96	2A AC 300V	LR62678	
XC5E	20,32,44,50,64,100	2A AC 300 V	LK020/8	
XC5F	20,32,44,50,64,100			
XC5G,XC5H	48,64,96			

#### **Omron Electronic Components, LLC**

**Terms and Conditions of Sales** 

#### I. GENERAL

- Definitions: The words used herein are defined as follows.
  - (a) (b) These terms and conditions Terms:

Omron Electronic Components LLC and its subsidiaries Seller:

The buyer of Products, including any end user in section III through VI (c) Buyer:

Products and/or services of Seller (d) Products: Including: Including without limitation

- Offer; Acceptance: These Terms are deemed part of all quotations, acknowledgments, invoices, purchase orders and other documents, whether electronic or in writing, relating to the sale of Products by Seller. Seller hereby objects to any Terms proposed in Buyer's purchase order or other documents which are inconsistent with, or in addition to, these
- Distributor: Any distributor shall inform its customer of the contents after and including section III of these Terms.

- Prices; Payment: All prices stated are current, subject to change without notice by Seller. Buyer agrees to pay the price in effect at the time the purchase order is accepted by Seller. Payments for Products received are due net 30 days unless otherwise stated in the invoice. Buyer shall have no right to set off any amounts against the amount owing in respect of this invoice.
- Discounts: Cash discounts, if any, will apply only on the net amount of invoices sent to Buyer after deducting transportation charges, taxes and duties, and will be allowed only if (a) the invoice is paid according to Seller's payment terms and (b) Buyer has no past due amounts owing to Seller.
- <u>Interest</u>: Seller, at its option, may charge Buyer 1.5% interest per month or the maximum legal rate, whichever is less, on any balance not paid within the stated terms.

- Orders: Seller will accept no order less than 200 U.S. dollars net billing.

  Currencies: If the prices quoted herein are in a currency other than U.S. dollars, Buyer shall make remittance to Seller at the then current exchange rate most favorable to Seller; provided that if remittance is not made when due, Buyer will convert the amount to U.S. dollars at the then current exchange rate most favorable to Seller available during the period between the due date and the date remittance is actually made.
- Governmental Approvals: Buyer shall be responsible for all costs involved in obtaining
- any government approvals: egarding the importation or sale of the Products.

  <u>Taxes</u>: All taxes, duties and other governmental charges (other than general real property and income taxes), including any interest or penalties thereon, imposed directly or indirectly on Seller or required to be collected directly or indirectly by Seller for the manufacture, production, sale, delivery, importation, consumption or use of the Products sold hereunder (including customs duties and sales, excise, use, turnover and license taxes) shall be charged to and remitted by Buyer to Seller.
- Financial: If the financial position of Buyer at any time becomes unsatisfactory to Seller, Seller reserves the right to stop shipments or require satisfactory security or payment in advance. If Buyer fails to make payment or otherwise comply with these Terms or any related agreement, Seller may (without liability and in addition to other remedies) cancel any unshipped portion of Products sold hereunder and stop any Products in transit until Buyer pays all amounts, including amounts payable hereunder, whether or not then due, which are owing to it by Buyer. Buyer shall in any event remain liable for all unpaid
- Cancellation; Etc: Orders are not subject to rescheduling or cancellation unless Buyer indemnifies Seller fully against all costs or expenses arising in connection therewith.
- Force Majeure: Seller shall not be liable for any delay or failure in delivery resulting from causes beyond its control, including earthquakes, fires, floods, strikes or other labor disputes, shortage of labor or materials, accidents to machinery, acts of sabotage, riots, delay in or lack of transportation or the requirements of any government authority.

- Shipping: Delivery: Unless otherwise expressly agreed in writing by Seller:

  (a) All sales and shipments of Products shall be FOB shipping point (unless otherwise All sales and singhness of Products shall be POS shipping point (timess unlesses stated in writing by Seller), at which point title to and all risk of loss of the Products shall pass from Seller to Buyer, provided that Seller shall retain a security interest in the Products until the full purchase price is paid by Buyer;
- Delivery and shipping dates are estimates only; and
- Seller will package Products as it deems proper for protection against normal handling and extra charges apply to special conditions.
- 12. Claims: Any claim by Buyer against Seller for shortage or damage to the Products occurring before delivery to the carrier or any claim related to pricing or other charges must be presented in detail in writing to Seller within 30 days of receipt of shipment.

#### **PRECAUTIONS**

- Suitability: IT IS THE BUYER'S SOLE RESPOINSIBILITY TO ENSURE THAT ANY OMRON PRODUCT IS FIT AND SUFFICIENT FOR USE IN A MOTORIZED VEHICLE APPLICATION. BUYER SHALL BE SOLELY RESPONSIBLE FOR DETERMINING APPROPRIATENESS OF THE PARTICULAR PRODUCT WITH RESPECT TO THE BUYER'S APPLICATION INCLUDING (A) ELECTRICAL OR ELECTRONIC COMPONENTS, (B) CIRCUITS, (C) SYSTEM ASSEMBLIES, (D) END PRODUCT, (E) SYSTEM, (F) MATERIALS OR SUBSTANCES OR (G) OPERATING ENVIRONMENT. Buyer acknowledges that it alone has determined that the Products will meet their requirements of the intended use in all cases. Buyer must know and observe all prohibitions of use applicable to the Product/s.
- Use with Attention: The followings are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible use of any Product, nor to imply that any use listed may be suitable for any Product:
  - Outdoor use, use involving potential chemical contamination or electrical
  - Use in consumer Products or any use in significant quantities.

- (c) Energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property. Prohibited Use: NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE PRODUCT IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.
- Motorized Vehicle Application: USE OF ANY PRODUCT/S FOR A MOTORIZED VEHICLE APPLICATION MUST BE EXPRESSLY STATED IN THE SPECIFICATION BY SELLER.
- Programmable Products: Seller shall not be responsible for the Buyer's programming of a programmable Product.

#### IV. WARRANTY AND LIMITATION

- Warranty: Seller's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Seller (or such other period expressed in writing by Seller). SELLER MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT ALL OTHER WARRANTIES, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS.
- Buyer Remedy: Seller's sole obligation hereunder shall be to replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product or, at Seller's election, to repay or credit Buyer an amount equal to the purchase price of the Product; provided that there shall be no liability for Seller or its affiliates unless Seller's analysis confirms that the Products were correctly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be
- approved in writing by Seller before shipment. <u>Limitation on Liability</u>: SELLER AND ITS AFFILIATES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT WARRANTY, NEGLIGENCE OR STRICT LIABILITY. FURTHER, IN NO EVENT SHALL LIABILITY OF SELLER OR ITS AFFILITATES EXCEED THE INDIVIDUAL PRICE OF THE PRODUCT ON WHICH LIABILITY IS ASSERTED.
- Indemnities: Buyer shall indemnity and hold harmless Seller, its affiliates and its employees from and against all liabilities, losses, claims, costs and expenses (including attorney's fees and expenses) related to any claim, investigation, litigation or proceeding (whether or not Seller is a party) which arises or is alleged to arise from Buyer's acts or omissions under these Terms or in any way with respect to the Products.

#### V. INFORMATION; ETC.

- Intellectual Property: The intellectual property embodied in the Products is the exclusive property of Seller and its affiliates and Buyer shall not attempt to duplicate it in any way without the written permission of Seller. Buyer (at its own expense) shall indemnify and hold harmless Seller and defend or settle any action brought against Seller to the extent that it is based on a claim that any Product made to Buyer specifications infringed intellectual property rights of another party.
- Property: Confidentiality: Notwithstanding any charges to Buyer for engineering or tooling, all engineering and tooling shall remain the exclusive property of Seller. All information and materials supplied by Seller to Buyer relating to the Products are confidential and proprietary, and Buyer shall limit distribution thereof to its trusted employees and strictly prevent disclosure to any third party.

  <u>Performance Data</u>: Performance data is provided as a guide in determining suitability
- and does not constitute a warranty. It may represent the result of Seller's test conditions, and the users must correlate it to actual application requirements.
- <u>Change In Specifications</u>: Product specifications and descriptions may be changed at any time based on improvements or other reasons. It is Seller's practice to change part numbers when published ratings or features are changed, or when significant engineering changes are made. However, some specifications of the Product may be changed without any notice.
- Errors And Omissions: The information on Seller's website or in other documentation has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.
- Export Controls: Buyer shall comply with all applicable laws, regulations and licenses regarding (a) export of the Products or information provided by Seller; (b) sale of Products to forbidden or other proscribed persons or organizations; (c) disclosure to noncitizens of regulated technology or information.

#### VI. MISCELLANEOUS

- Waiver: No failure or delay by Seller in exercising any right and no course of dealing between Buyer and Seller shall operate as a waiver of rights by Seller.
- Assignment: Buyer may not assign its rights hereunder without Seller's written consent.
- Law: These Terms are governed by Illinois law (without regard to conflict of laws). Federal and state courts in Cook County, Illinois have exclusive jurisdiction for any dispute hereunder.
- Amendment: These Terms constitute the entire agreement between Buyer and Seller relating to the Products, and no provision may be changed or waived unless in writing signed by the parties.
- Severability: If any provision hereof is rendered ineffective or invalid, such provision shall not invalidate any other provision



### OMRON

#### **OMRON ELECTRONIC COMPONENTS LLC**

55 Commerce Drive, Suite B, Schaumburg, IL, 60173, U.S.A. Tel: (1) 847-882-2288/Fax: (1) 847-882-2192

**OMRON CANADA. INC** 

885 Milner Ave.Toront,Ont.M1S 4R6 Tel: (1) 416-286-6465/Fax: (1) 410-286-6648 **Authorized Distributor:**