

**AVX**  
A KYOCERA GROUP COMPANY



**ELCO**  
**Memory Card Connectors**

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## Introduction

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AVX offers a broad range of Memory Card connectors for removable storage memory applications in hand held data and communications equipment.

### **PCMCIA**

5025 Connectors, SMT, DIP, Zero standoff, 5v, Normal and Reverse, Single and Dual  
5025 Ejectors, SMT, DIP, Zero standoff, 5v, Normal and Reverse, Single and Dual  
5069 Connectors, Single/Double sided, Zero Standoff, 5v, Reverse  
5027 Connectors, SMT, Zero and 2.2mm standoff, 3.3v and 5v, Normal and Reverse  
5027 Ejectors, SMT, Zero and 2.2mm standoff, 3.3v and 5v, Normal and Reverse  
5027 Cardbus Connectors, SMT, Zero standoff  
9180 Frameless Type II PC Card Kits; Connectors, Covers, I/Os

### **COMPACT FLASH (CF)**

5610 Connectors, Type I, Zero and 2mm standoff, Normal and Reverse  
5610 Ejectors, Type I, Zero and 2mm standoff, Normal and Reverse  
5620 Connectors, Type II, Zero and 2mm standoff, Normal and Reverse  
5620 Ejectors, Type II, Zero and 2mm standoff, Normal and Reverse  
5611 Connectors, Type I & II, Single/Double sided  
5612 Covers With Insulating Tape

### **MULTIMEDIA CARD (MMC)**

5038 Connectors, Non-eject, push eject, and push/push eject options

### **SECURE DIGITAL (SD)**

5638 Connectors, Non-eject, push eject, and push/push eject options

### **S.O. DIMM**

6401 Connectors, SMT RA, 5.5mm profile height  
6402 Connectors, SMT, RA, profile height options 4, 5.2 and 5.6mm  
6403 Connectors, SMT/DIP, ST, 3.3v and 5v

# PCMCIA PC Memory Card Connectors



## Features/Benefits

### SERIES 5025

Series 5025 offers single or double stacked header combinations in SMT or Through Hole.

Also, this series meets the requirements of Ver. 4.2/PCMCIA Type I, II and III equipment.

Upper and lower stage of header offers the combination of DIP/SMT and DIP/DIP.

This product meets or exceeds the minimum requirements outlined in the PC Card specification for technical and performance criteria.

### SERIES 5027

This is an SMT lightweight connector for 3.3v or 5v cards.

Height is 5.0mm (0.197), weight is under 10 grams (with single ejector mechanism) which is one of the lightest available in this industry.

Dual type is 2 pcs, side-by-side configuration and you can choose "With Ejector type" or "Without Ejector type".

This meets the requirements of PCMCIA, Type I, II and III.

This product meets or exceeds the minimum requirements outlined in the PC Card specification for technical and performance criteria.

### SERIES 5069

1.27mm (0.05) pitch 68 positions plug connector designed for PC card. Contacts on the card side is arranged in two rows and the substrate side has DIP type and SMT type.

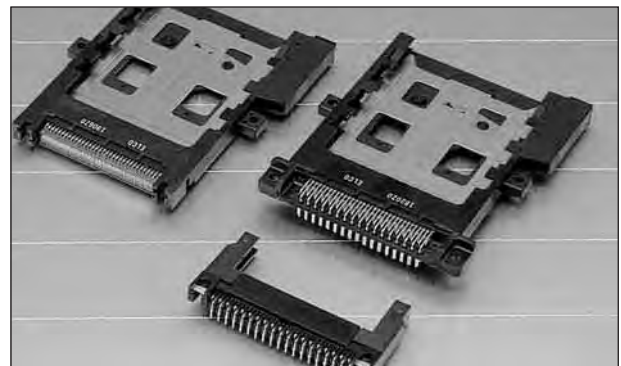
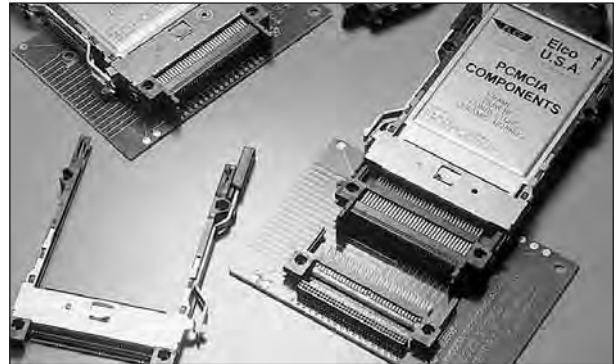
Receptacle (card side) connector is also available.

This product meets or exceeds the minimum requirements outlined in the PC Card specification for technical and performance criteria.

### SERIES 9180

The 9180 series PC Card kits offers the broadest range of standard options in the industry. This includes; SMT connectors with multiple offsets, I/O connectors, label recesses, cover insulating films and wireless extensions. Assembly is accomplished by a simple snap together process with a low cost production tool.

This product meets or exceeds the minimum requirements outlined in the PC Card specification for technical and performance criteria.

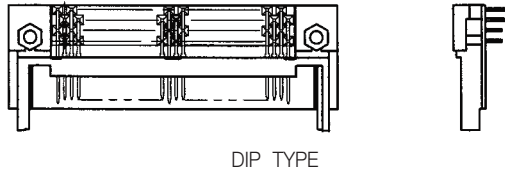
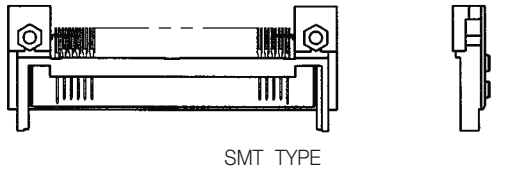


# PCMCIA PC Memory Card Connectors

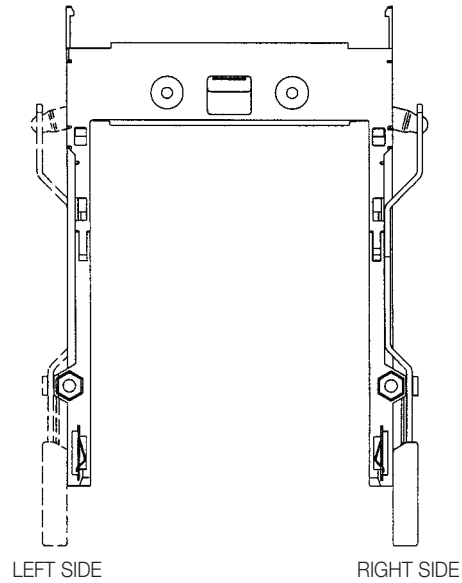


## Series 5025 Product Selection Guide

### CONNECTOR



### EJECTOR



### SINGLE SMT

Connector Style			Ejector Style	How To Order		Page
Stand Off	Voltage	Keying	Button Side	Connector	Ejector	
Height=0	5v	Normal	Left	31 5025 068 305 871	30 5025 000 321 000	6, 7
			Right	31 5025 068 305 871	30 5025 000 322 000	
Height=0	5v	Reverse	Left	31 5025 068 355 871	30 5025 000 321 000	6, 7
			Right	31 5025 068 355 871	30 5025 000 322 000	

### SINGLE DIP

Connector Style			Ejector Style	How To Order		Page
Stand Off	Voltage	Keying	Button Side	Connector	Ejector	
Height=0	5v	Normal	Left	31 5025 068 100 871	30 5025 000 321 000	8, 9
			Right	31 5025 068 100 871	30 5025 000 322 000	
Height=0	5v	Reverse	Left	31 5025 068 150 871	30 5025 000 321 000	8, 9
			Right	31 5025 068 150 871	30 5025 000 322 000	

Note – If drawings are required then please contact your local sales office.

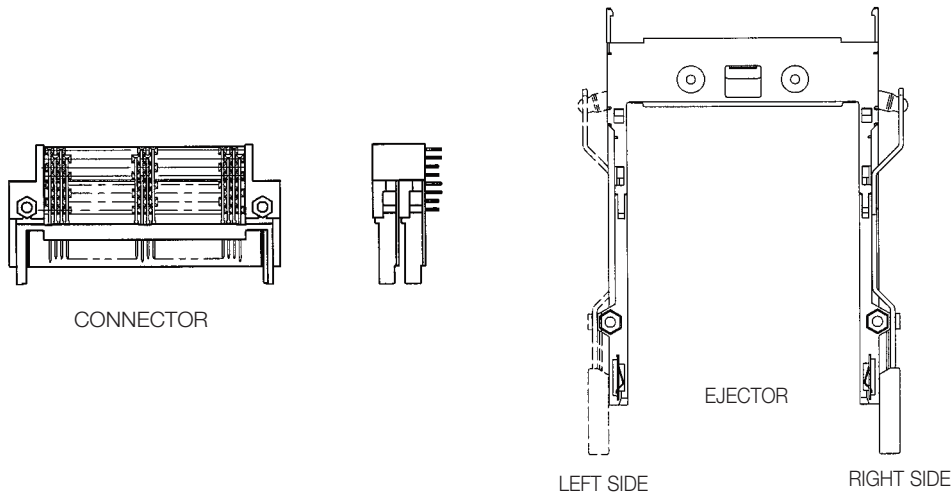


# PCMCIA PC Memory Card Connectors



## Series 5025 Product Selection Guide

### SERIES 5025



### DUAL DIP/DIP

Connector Style			Ejector Style	Assembly Number	How To Order	Page
Stand Off	Voltage	Keying	Button Side	Connector	Ejector	
Height=0	5v	Normal	Left/Left	<b>31 5025 136 500 871</b>	<b>30 5025 000 621 000</b>	10, 11
			Right/Right	<b>31 5025 136 500 871</b>	<b>30 5025 000 622 000</b>	
			Left/Right	<b>31 5025 136 500 871</b>	<b>30 5025 000 623 000</b>	
			Right/Left	<b>31 5025 136 500 871</b>	<b>30 5025 000 624 000</b>	
Height=0	5v	Reverse	Left/Left	<b>31 5025 136 550 871</b>	<b>30 5025 000 621 000</b>	10, 11
			Right/Right	<b>31 5025 136 550 871</b>	<b>30 5025 000 622 000</b>	
			Left/Right	<b>31 5025 136 550 871</b>	<b>30 5025 000 623 000</b>	
			Right/Left	<b>31 5025 136 550 871</b>	<b>30 5025 000 624 000</b>	

Note – If drawings are required then please contact your local sales office.

Assembly number for connector above comprises of a lower and upper header that needs to be ordered separately. See below on How To Order.

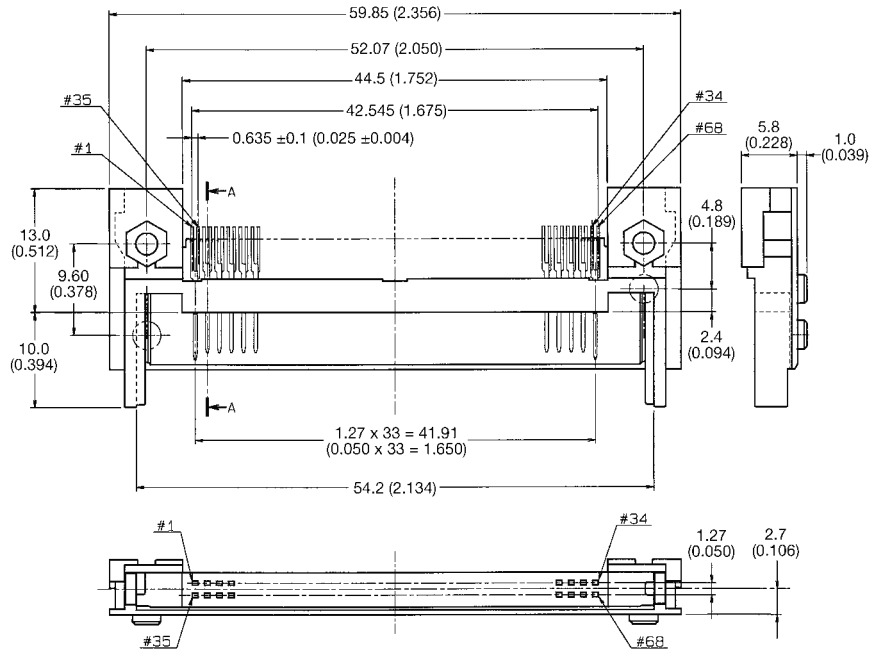
Assembly Number	Header Type	How To Order	Page
<b>31 5025 136 500 871</b>	Upper Header	<b>31 5025 068 200 871</b>	10, 11
	Lower Header	<b>31 5025 068 100 871</b>	
<b>31 5025 136 550 871</b>	Upper Header	<b>31 5025 068 250 871</b>	10, 11
	Lower Header	<b>31 5025 068 150 871</b>	

# PCMCIA PC Memory Card Connectors



## Series 5025 SMT SINGLE Header/Ejector Assembly

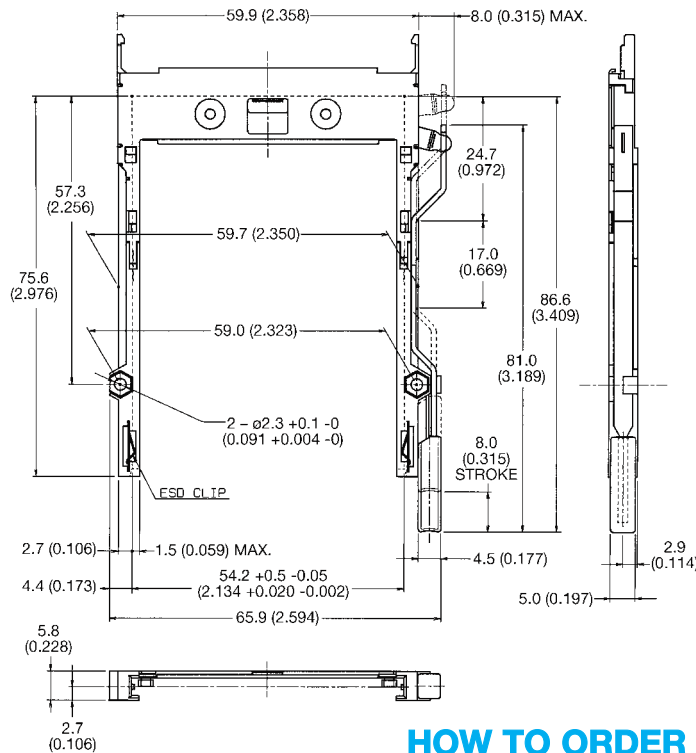
### CONNECTOR



### HOW TO ORDER

31 5025 068 305 871

### EJECTOR



Variation Code  
See page 4

### HOW TO ORDER

30 5025 000 322 000

Variation Code  
See page 4

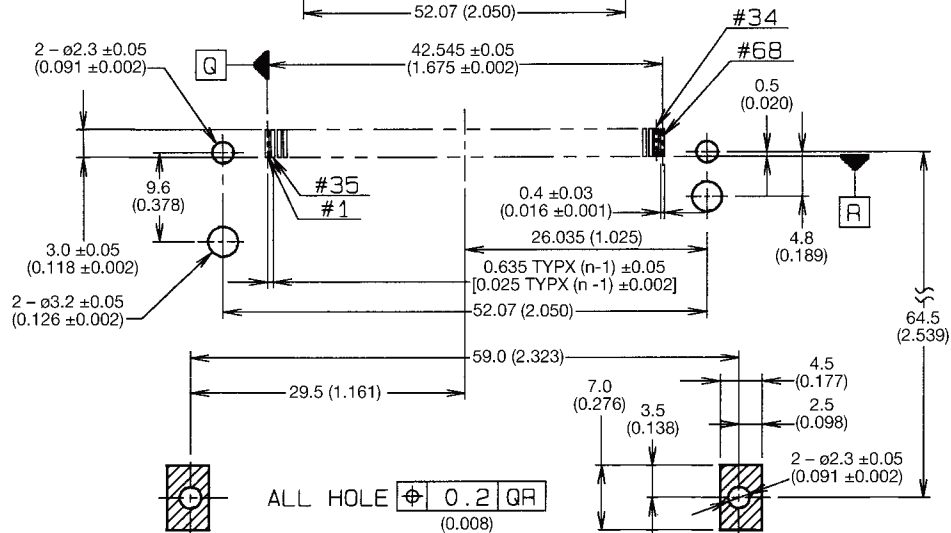
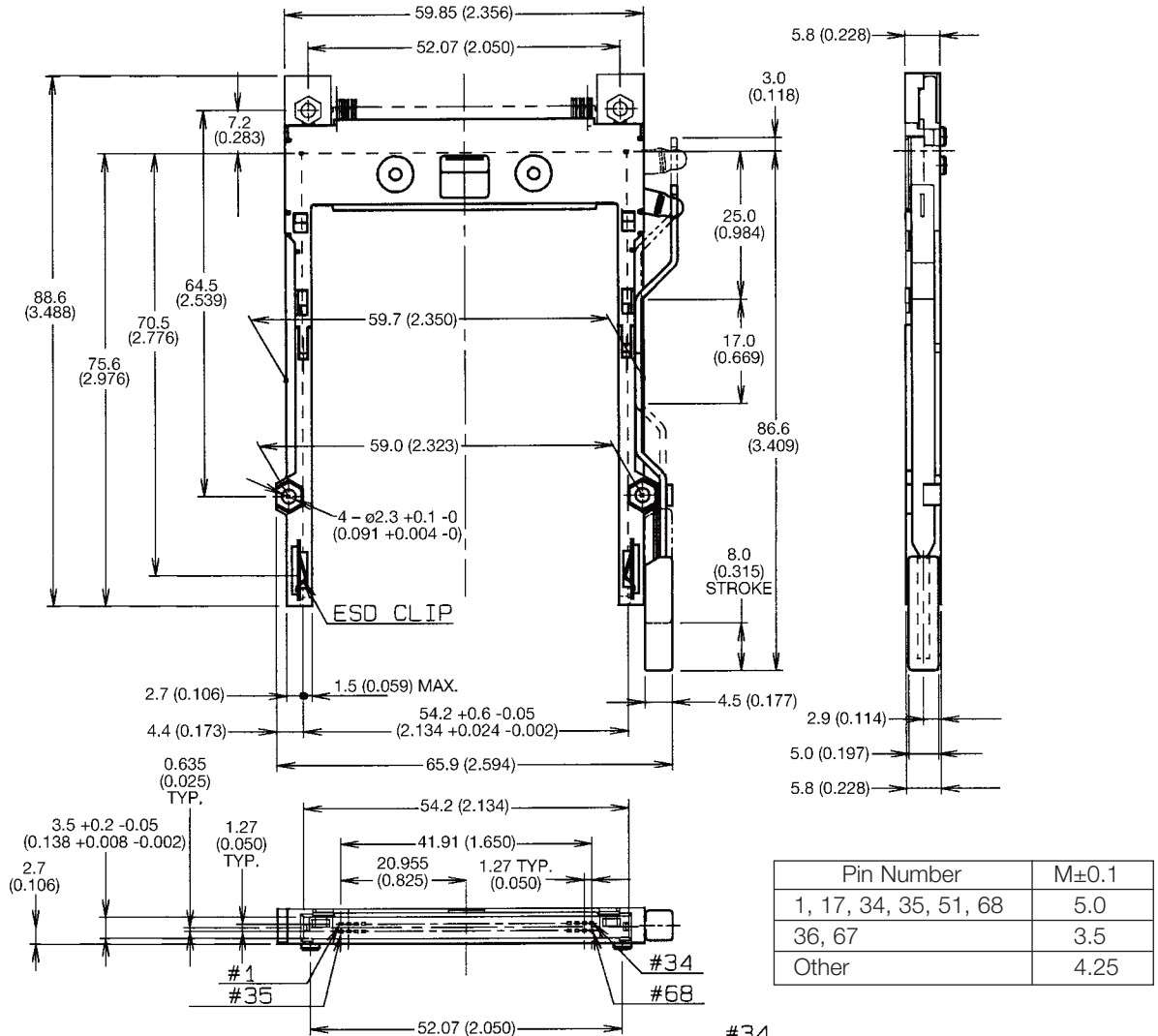


# PCMCIA PC Memory Card Connectors



## Series 5025 SMT SINGLE Header/Ejector Assembly

### ASSEMBLY



RECOMMENDED PRINTED CIRCUIT LAYOUT

See page 4 for How To Order



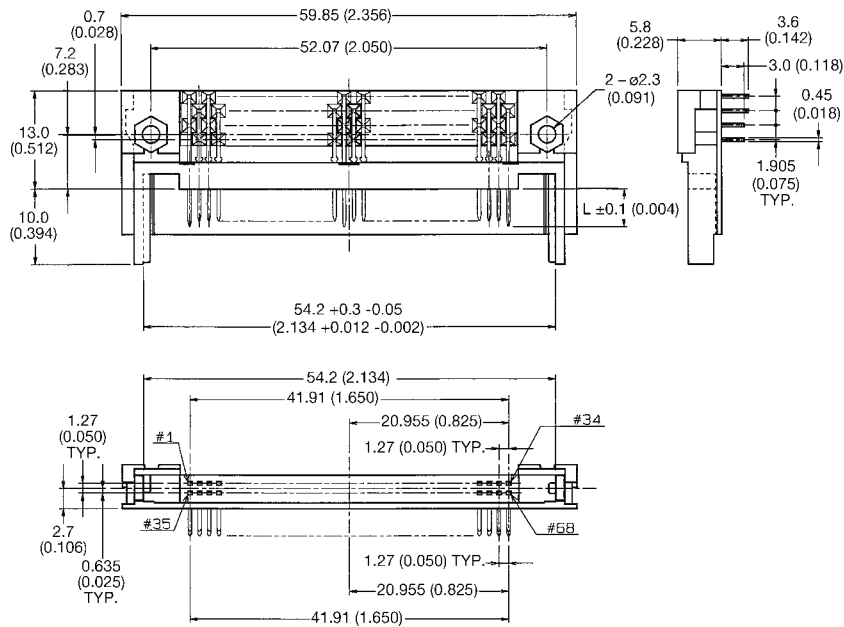


# PCMCIA PC Memory Card Connectors



## Series 5025 DIP SINGLE Header/Ejector Assembly

### CONNECTOR

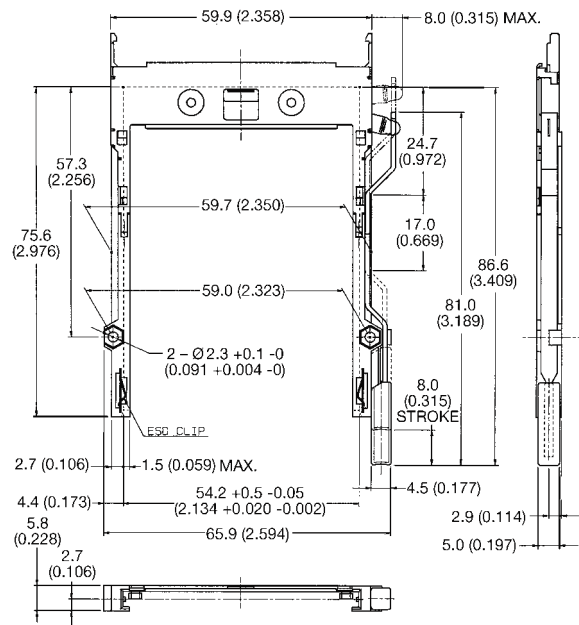


### HOW TO ORDER

31 5025 068 100 871

Variation Code  
See page 4

### EJECTOR



### HOW TO ORDER

30 5025 000 322 000

Variation Code  
See page 4

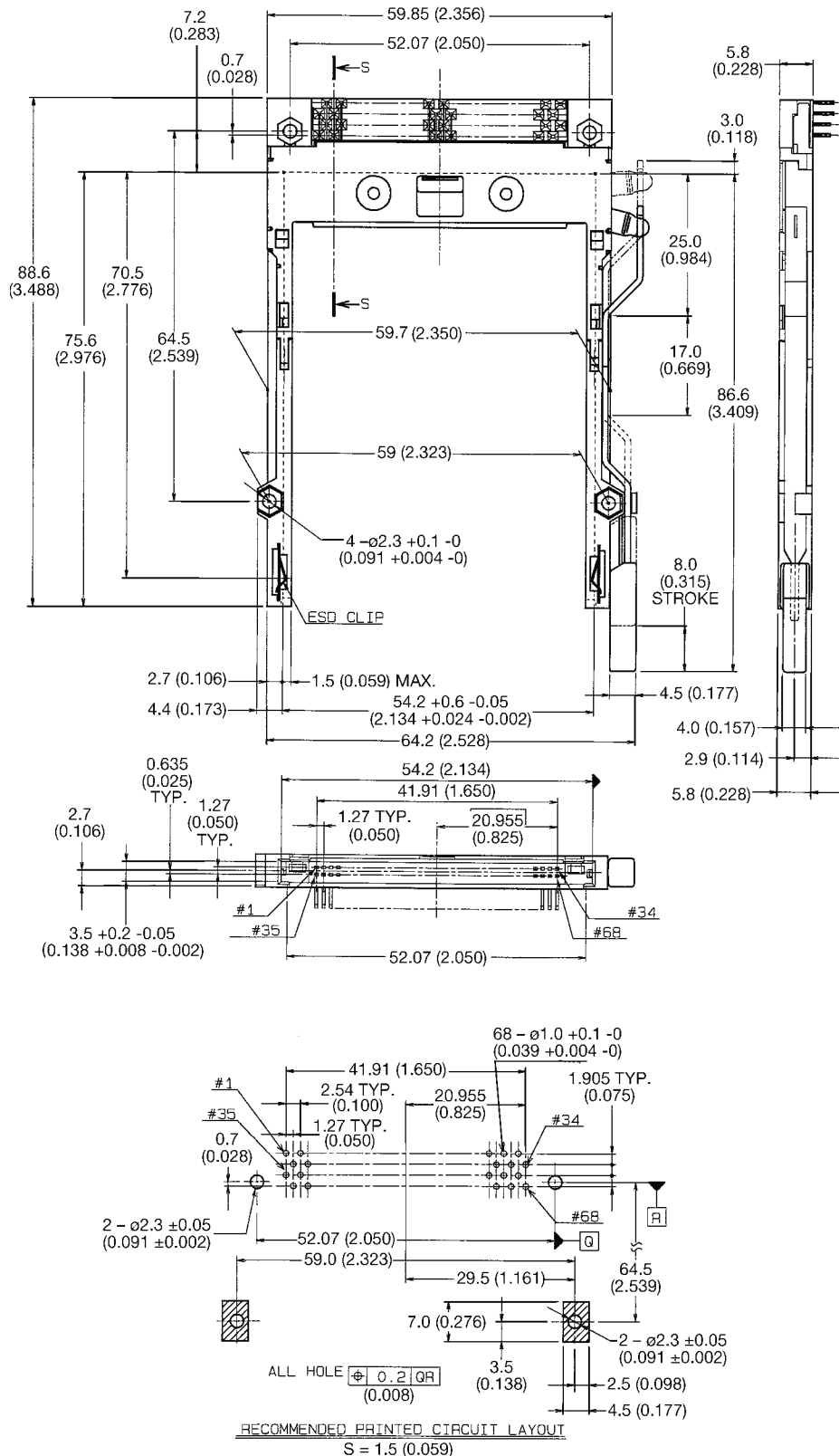


# PCMCIA PC Memory Card Connectors



## Series 5025 DIP SINGLE Header/Ejector Assembly

### ASSEMBLY



See page 4 for How To Order



# PCMCIA PC Memory Card Connectors

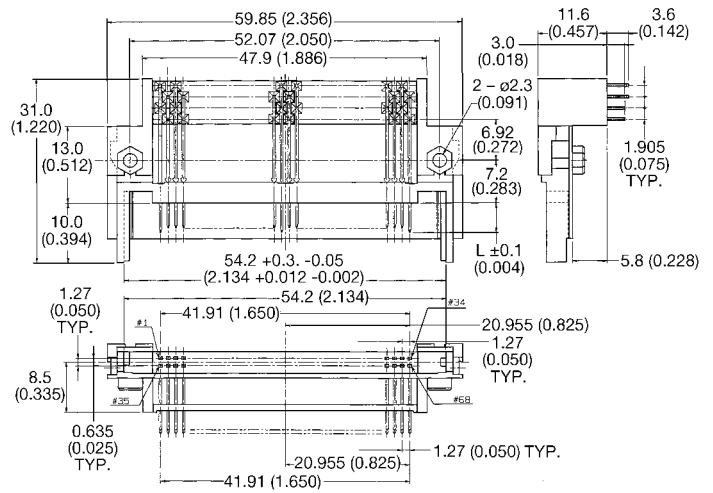
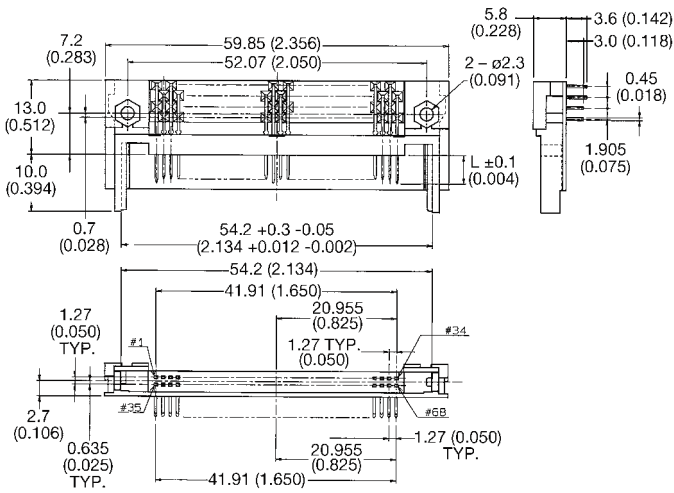


## Series 5025 DIP DUAL Header/Ejector Assembly

### CONNECTOR

LOWER

UPPER



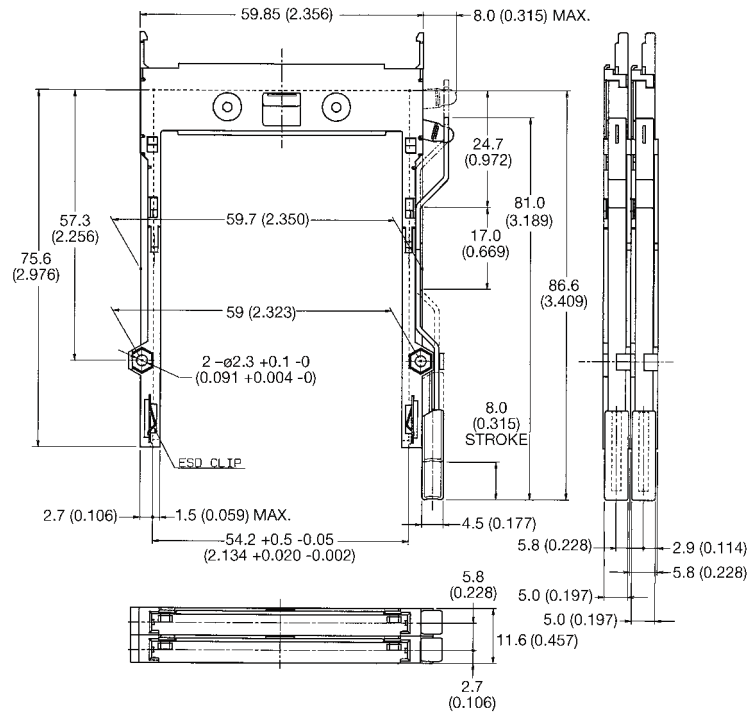
### ASSEMBLY NUMBER

31 5025 136 5X0 871

#### Variation Code

See page 5  
500 = Normal  
550 = Reverse

### EJECTOR



### HOW TO ORDER

30 5025 000 622 000

Variation Code  
See page 5

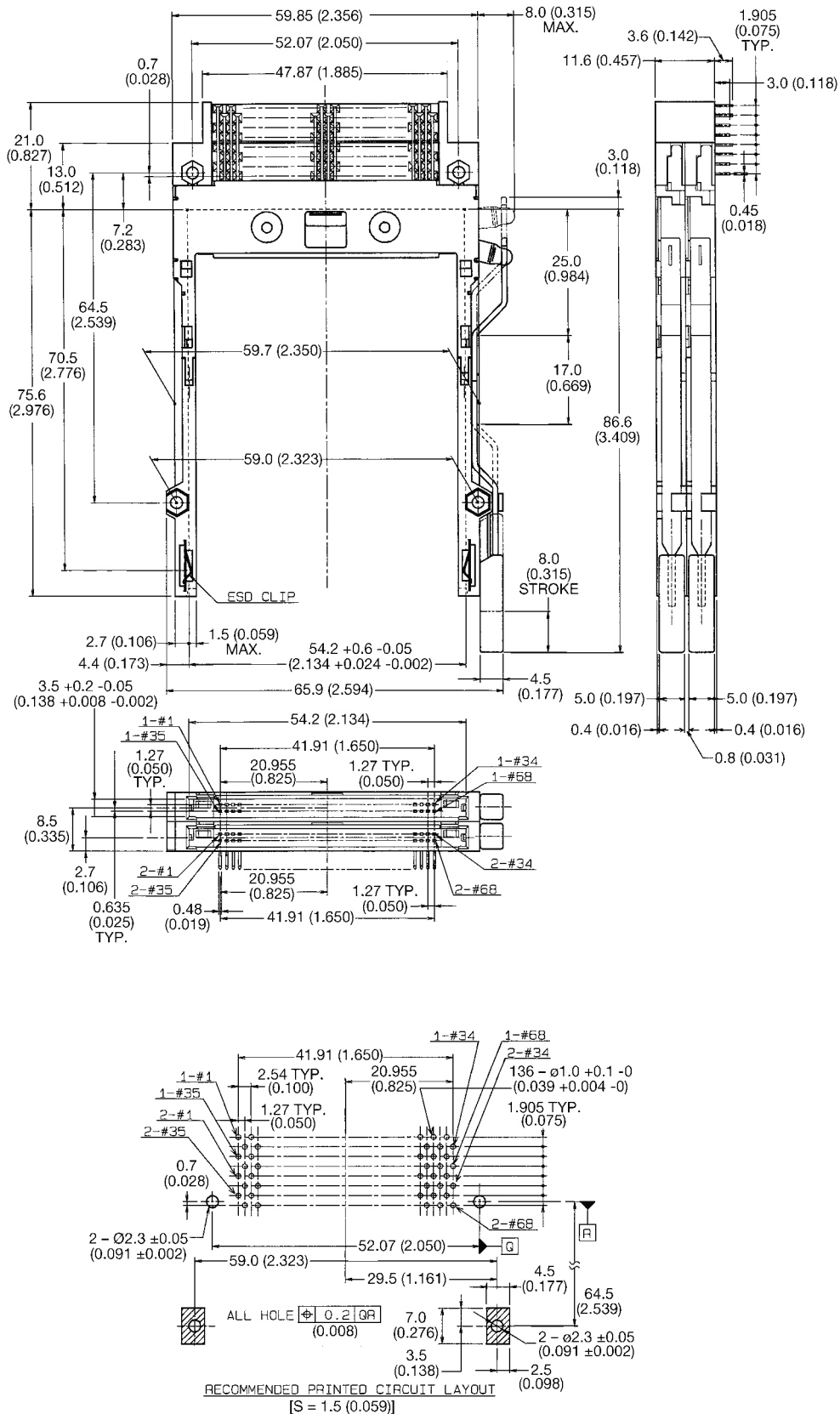


# PCMCIA PC Memory Card Connectors



## Series 5025 DIP DUAL Header/Ejector Assembly

### ASSEMBLY



See page 5 for How To Order



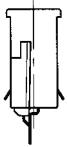
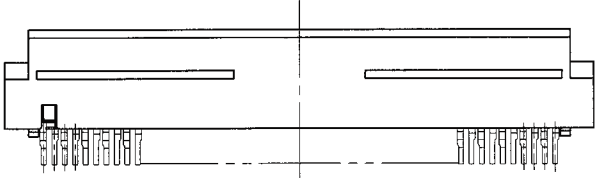
# PCMCIA PC Memory Card Connectors



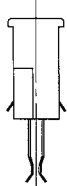
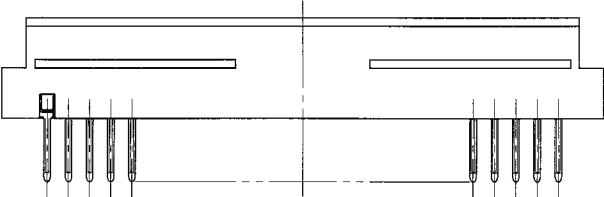
## Series 5069 Product Selection Guide

### SERIES 5069

**SINGLE SIDE**



**STRADDLE TAIL**



Solder Tail Style	How To Order	Packaging		
		Straddle Mount	<b>20 5069 068 003 871</b>	Semi-Hard Tray
Single Side	<b>24 5069 068 901 835</b>	Tape and Reel	1000 Tape and Reel	

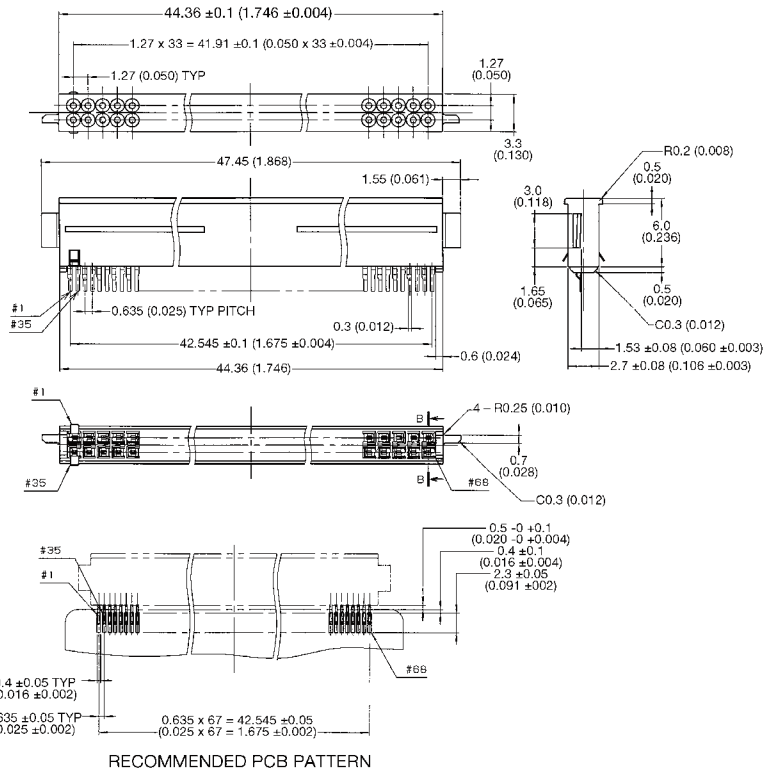
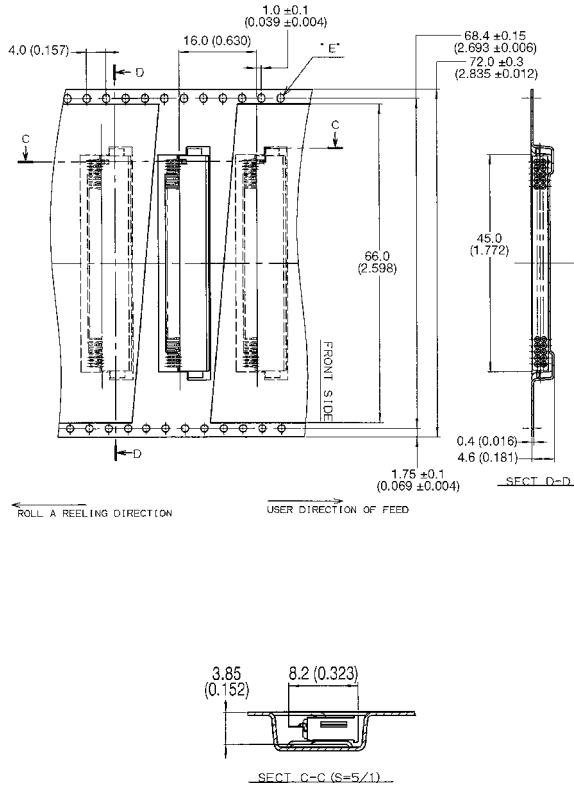


# PCMCIA PC Memory Card Connectors



## Series 5069 Receptacle Connectors

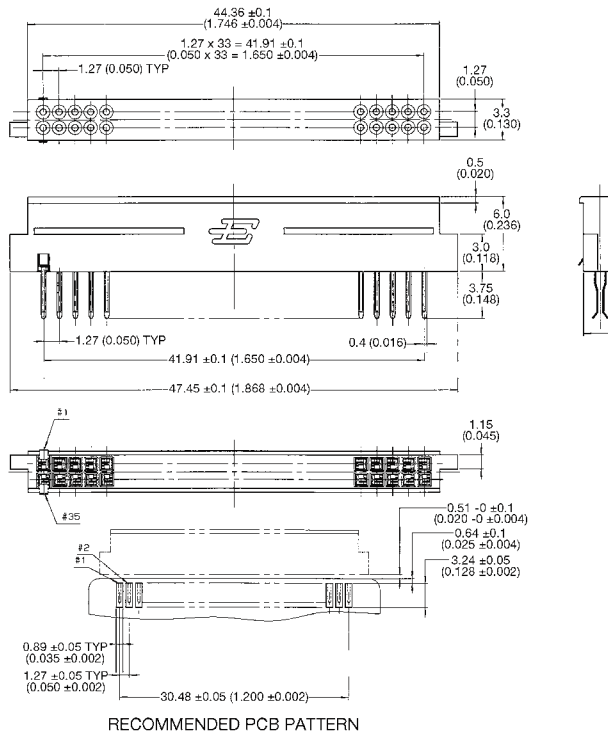
### SINGLE SIDE



### HOW TO ORDER

24 5069 068 901 835

### STRADDLE



1000 per Tape and Reel

### HOW TO ORDER

20 5069 068 003 871

840 per Box

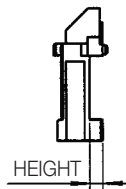
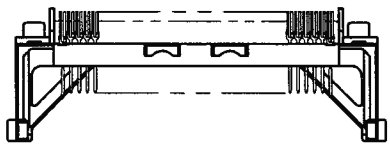




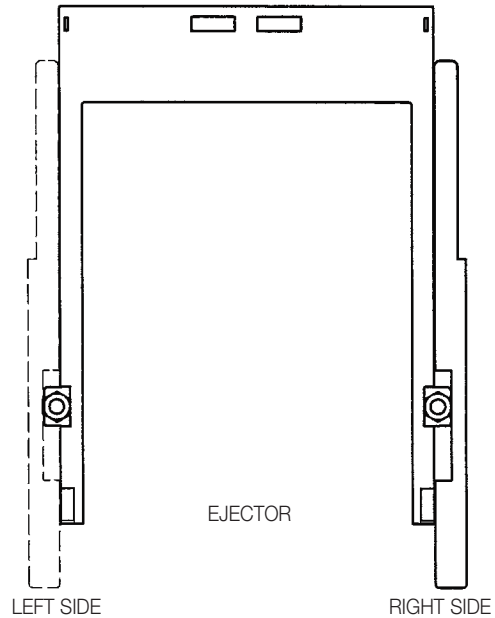
# PCMCIA PC Memory Card Connectors



## Series 5027 Product Selection Guide



CONNECTOR



EJECTOR

Connector Style			Ejector Style	How To Order		Page	
Stand Off	Voltage	Keying	Button Side	Connector	Ejector		
Height=0	5v	Normal	Left	<b>31 5027 068 010 871</b>	<b>30 5027 000 001 000</b>	15, 16	
			Right	<b>31 5027 068 010 871</b>	<b>30 5027 000 002 000</b>		
Height=0	5v	Reverse	Left	<b>31 5027 068 020 871</b>	<b>30 5027 000 001 000</b>		
			Right	<b>31 5027 068 020 871</b>	<b>30 5027 000 002 000</b>		
Height=0	3.3v	Normal	Left	<b>31 5027 068 030 871</b>	<b>30 5027 000 001 000</b>		
			Right	<b>31 5027 068 030 871</b>	<b>30 5027 000 002 000</b>		
Height=0	3.3v	Reverse	Left	<b>31 5027 068 040 871</b>	<b>30 5027 000 001 000</b>		
			Right	<b>31 5027 068 040 871</b>	<b>30 5027 000 002 000</b>		
Height=2.2	5v	Normal	Left	<b>31 5027 068 110 871</b>	<b>30 5027 000 101 000</b>		17, 18
			Right	<b>31 5027 068 110 871</b>	<b>30 5027 000 102 000</b>		
Height=2.2	5v	Reverse	Left	<b>31 5027 068 120 871</b>	<b>30 5027 000 101 000</b>		
			Right	<b>31 5027 068 120 871</b>	<b>30 5027 000 102 000</b>		
Height=2.2	3.3v	Normal	Left	<b>31 5027 068 130 871</b>	<b>30 5027 000 101 000</b>		
			Right	<b>31 5027 068 130 871</b>	<b>30 5027 000 102 000</b>		
Height=2.2	3.3v	Reverse	Left	<b>31 5027 068 140 871</b>	<b>30 5027 000 101 000</b>		
			Right	<b>31 5027 068 140 871</b>	<b>30 5027 000 102 000</b>		

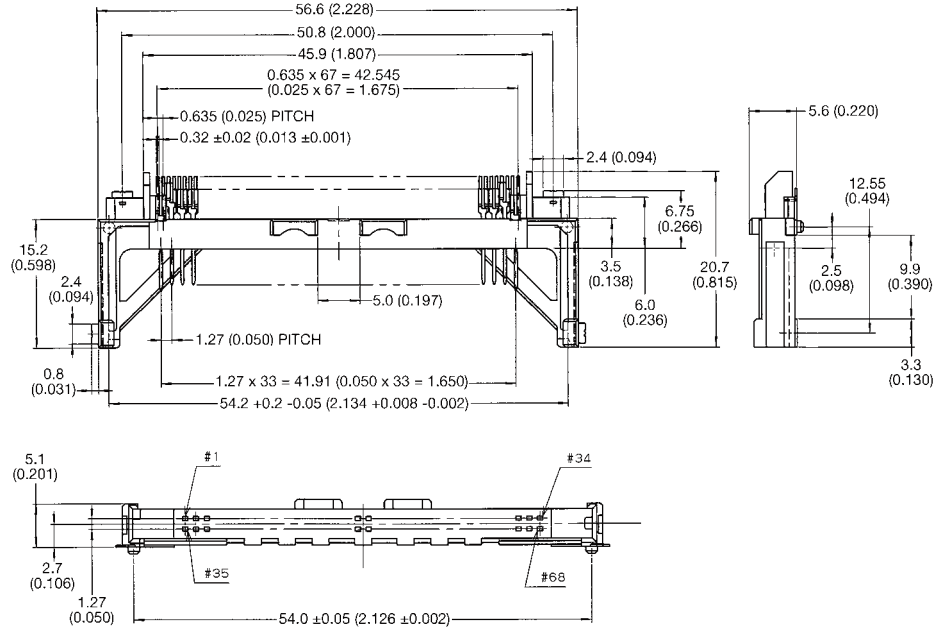
Note – If drawings are required then please contact your local sales office.

# PCMCIA PC Memory Card Connectors



## Series 5027 Header/Ejector Assembly H=0mm

### CONNECTOR

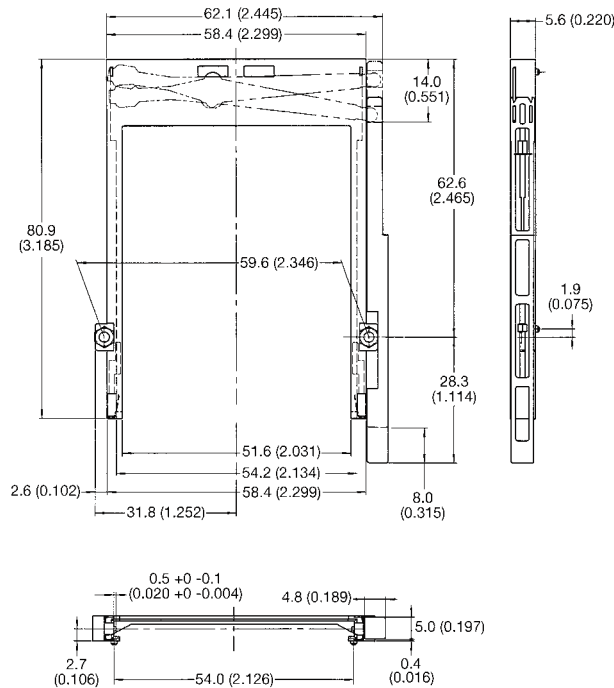


### HOW TO ORDER

31 5027 068 010 871

Variation Code  
See page 14

### EJECTOR



### HOW TO ORDER

30 5027 000 002 000

Variation Code  
See page 14

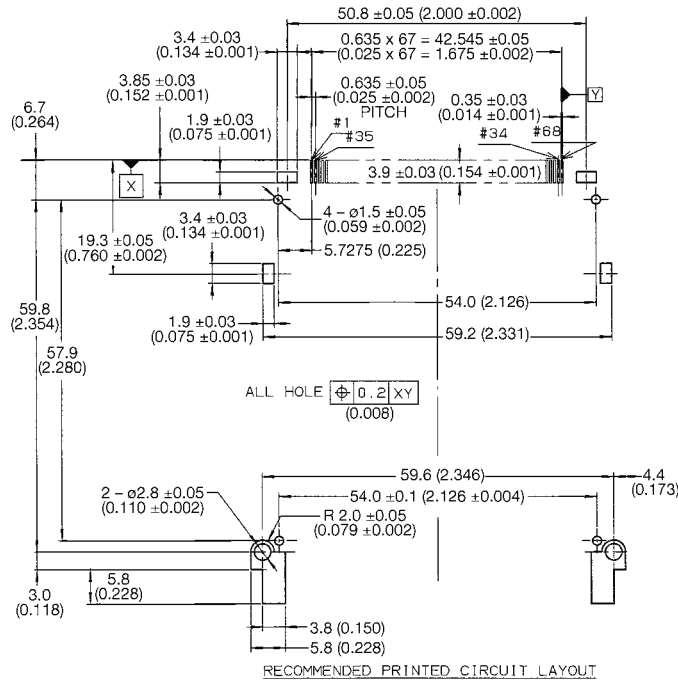
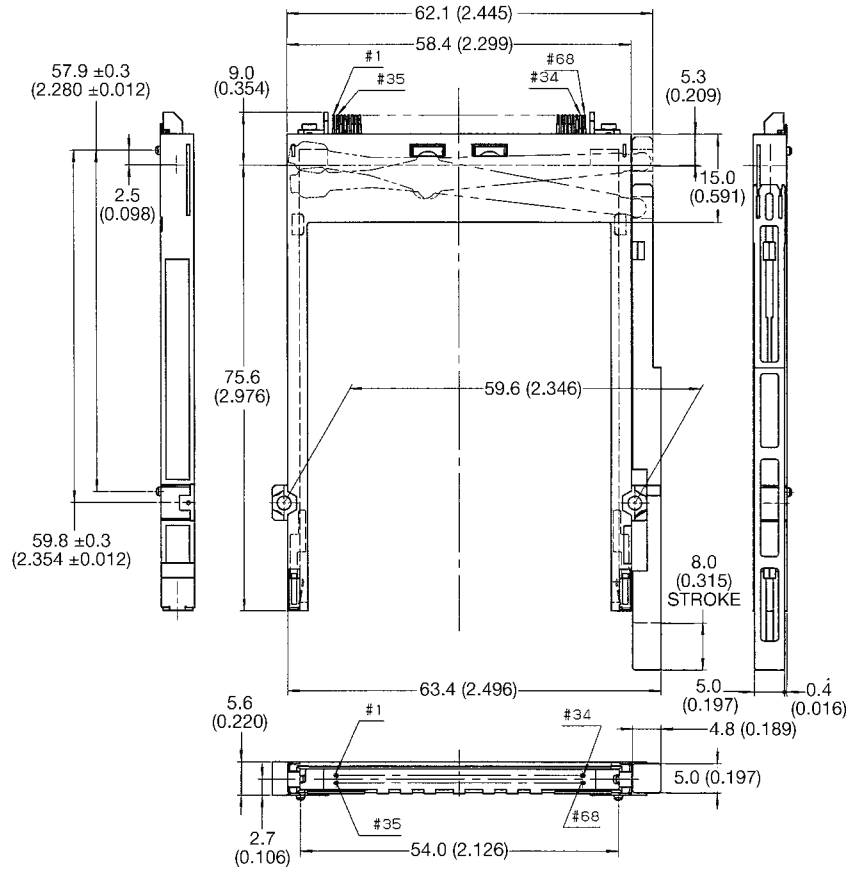


# PCMCIA PC Memory Card Connectors



## Series 5027 Header/Ejector H=0mm

### ASSEMBLY



See page 14 for How To Order

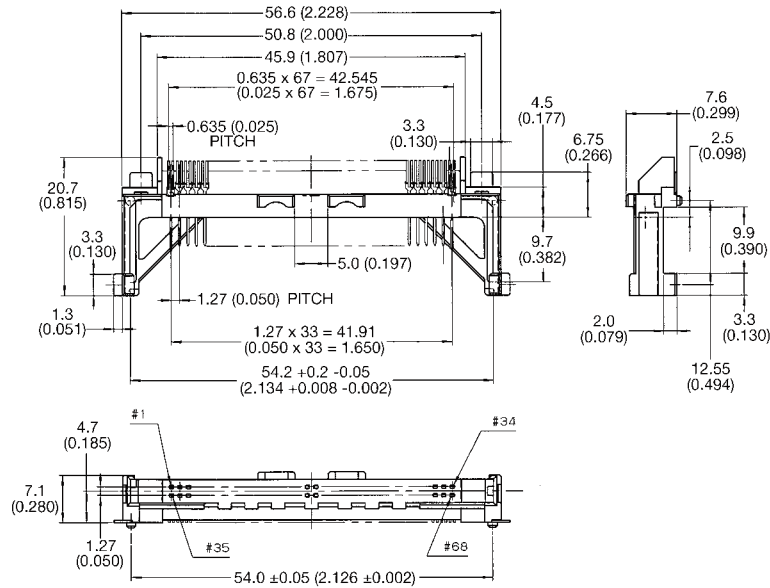


# PCMCIA PC Memory Card Connectors



## Series 5027 Header/Ejector H=2.2mm

### CONNECTOR

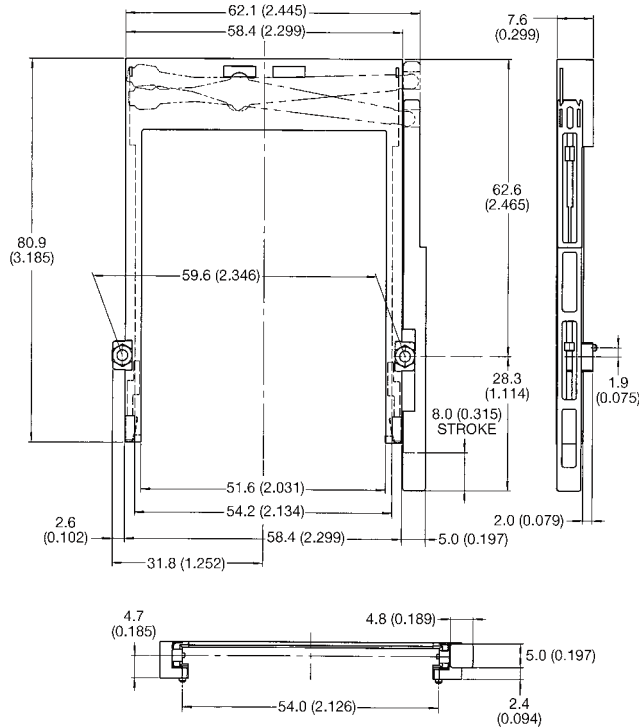


### HOW TO ORDER

31 5027 068 110 871

Variation Code  
See page 14

### EJECTOR



### HOW TO ORDER

30 5027 000 101 000

Variation Code  
See page 14

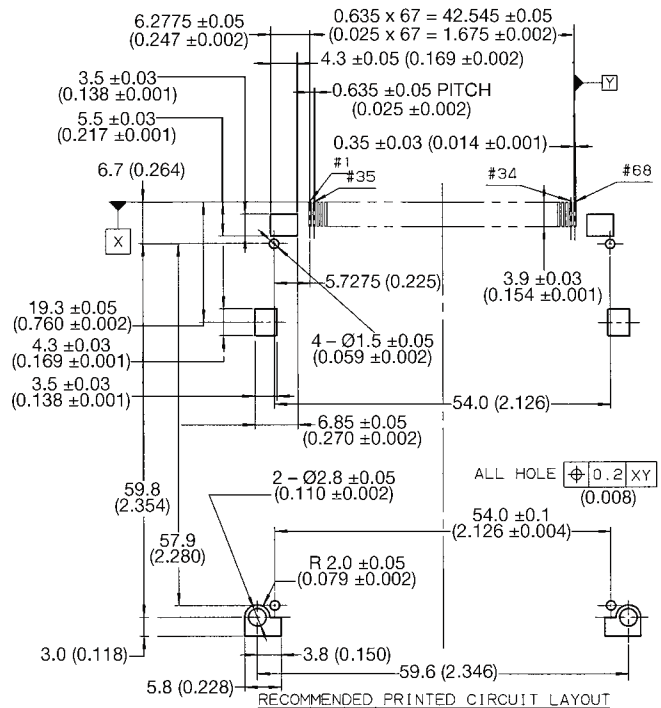
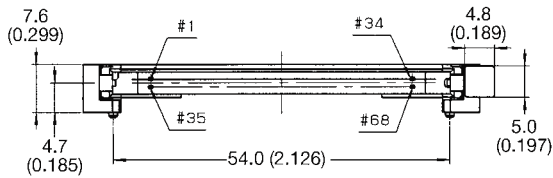
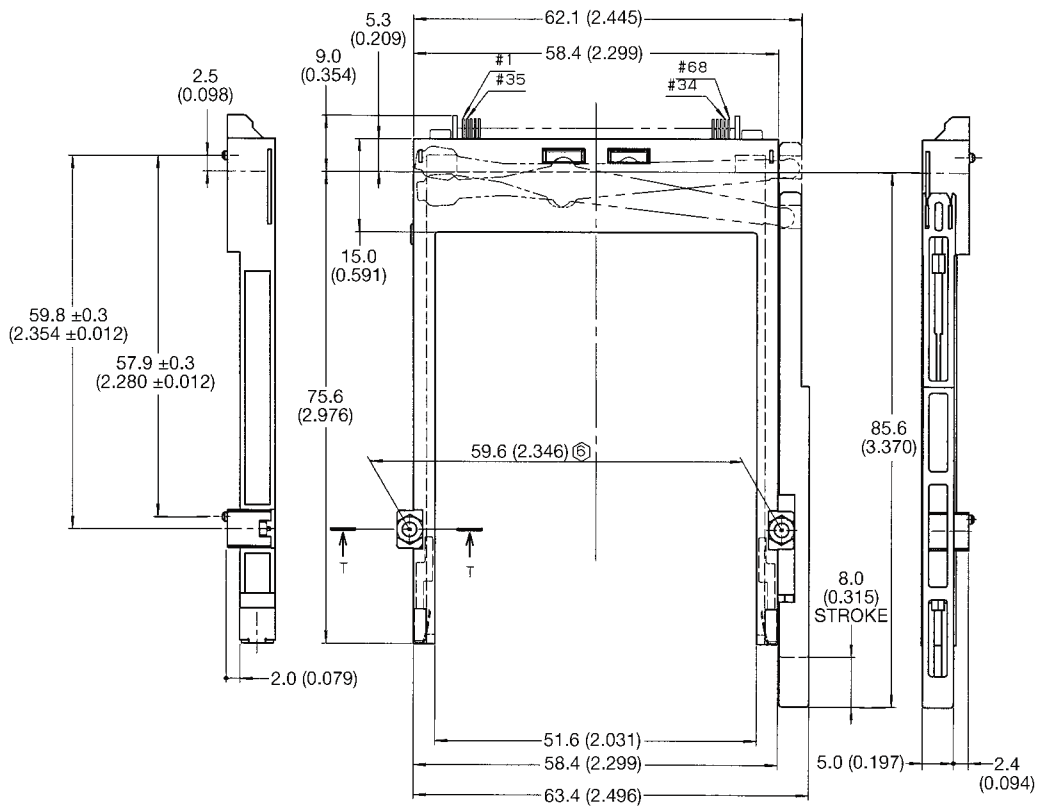


# PCMCIA PC Memory Card Connectors



## Series 5027 Header/Ejector H=2.2mm

### ASSEMBLY



See page 14 for How To Order

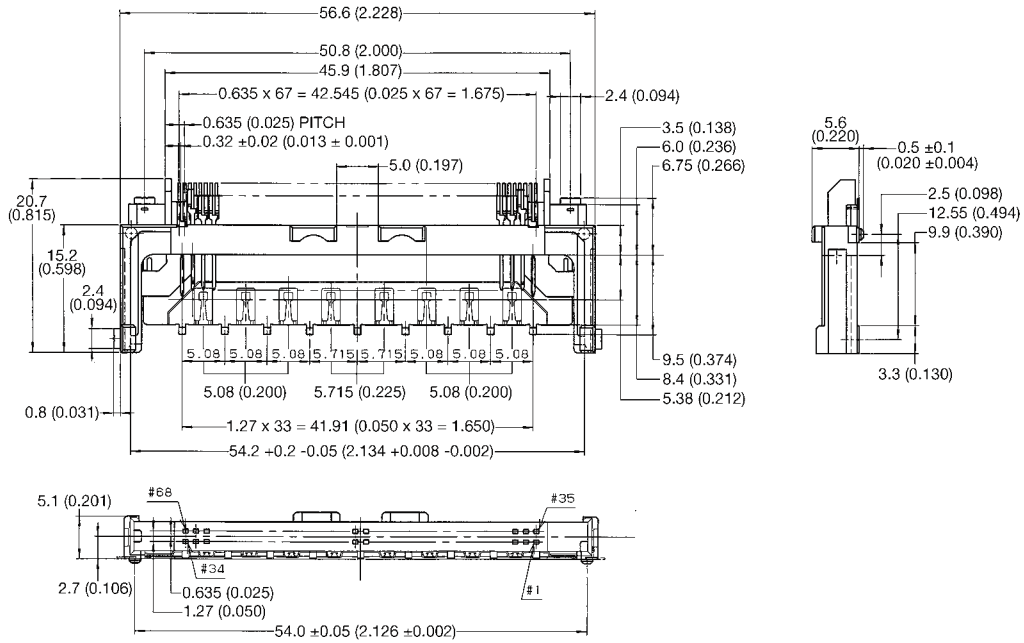


# PCMCIA PC Memory Card Connectors



## Series 5027 Card Bus SMT Connector Vacuum Cover H=0mm

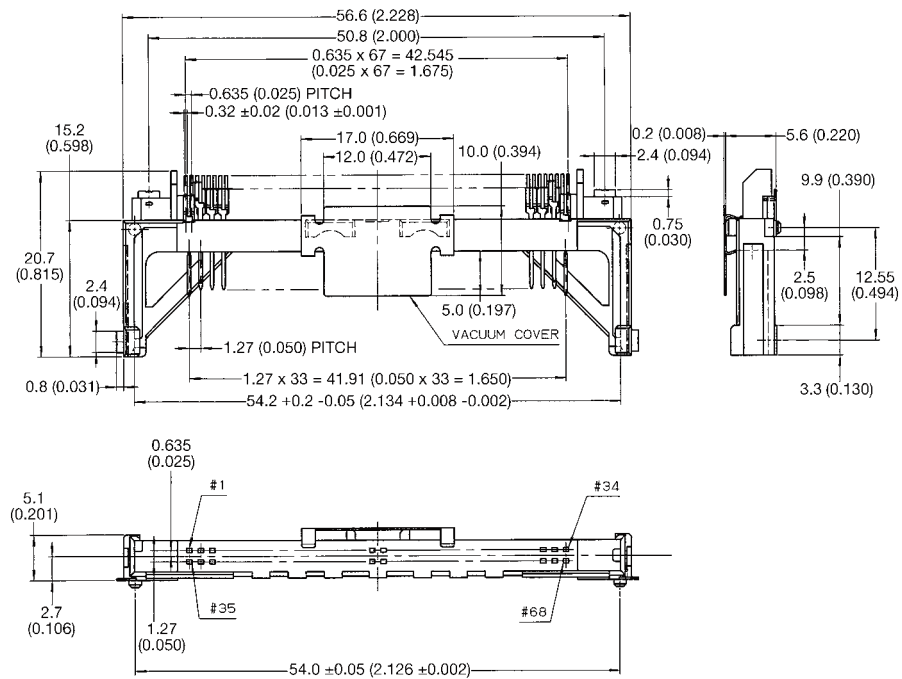
### CARD BUS



### HOW TO ORDER

31 5027 068 540 871

### VACUUM COVER H=0MM



### HOW TO ORDER

35 5027 068 030 871





# Compact Flash Memory Card Connectors



## Features/Benefits

### TYPE I SERIES 5610/5611/5612

Series 5610, 5611 and 5612 are memory card connectors supporting Compact Flash. They are used for small portable devices such as digital cameras, Notebook PC, PDA, etc.

Series 5610 consists of header and ejector, Series 5611 of card receptacle connector and Series 5612 of card kit covers.

The header supports auto-mounting processes. It offers many options of ejector-button position and customized design. In addition to the normal and reverse type, standoff type (H=0/H=2.0) can also be offered, which enables the components to be mounted on the back side of card. The connector used for card side has variations of straddle mount type and single side mount type.

### TECHNICAL SPECIFICATIONS

#### Series 5610

<b>Number of Contacts:</b>	50
<b>Pitch:</b>	1.27mm (0.05) Grid
Tail Pitch:	0.635mm (0.025)
<b>Current Rating:</b>	0.5A Max.
<b>Voltage Rating:</b>	5V Max.
<b>DW Voltage:</b>	500V rms/min.
<b>Mating Cycles</b>	10,000

#### Series 5611

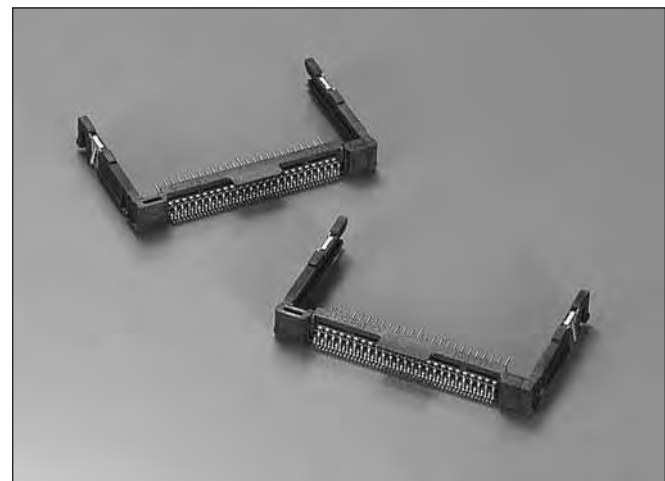
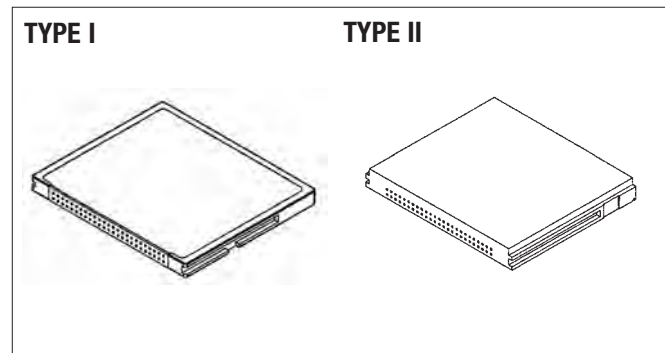
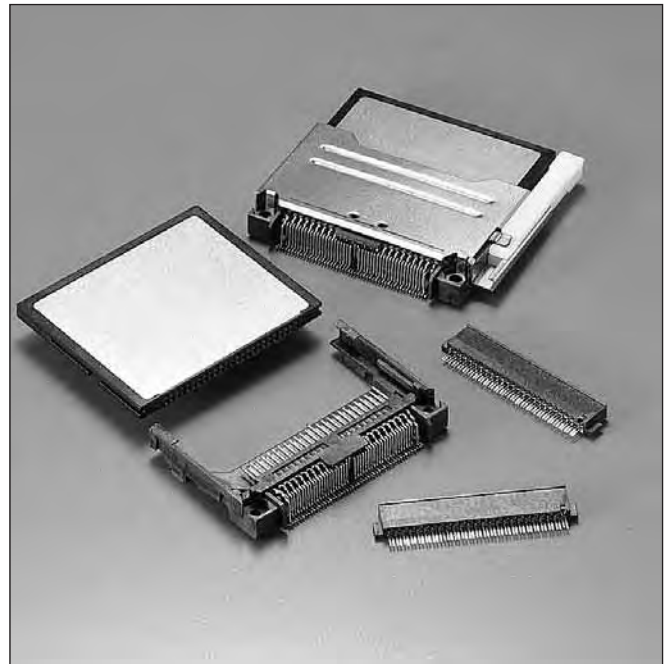
<b>Number of Contacts:</b>	50
<b>Pitch:</b>	1.27mm (0.05) Grid
Tail Pitch	
Straddle:	1.27mm (0.05)
Single Side:	0.635mm (0.025)
<b>Current Rating:</b>	0.5A Max.
<b>Voltage Rating:</b>	5V Max.
<b>DW Voltage:</b>	500V rms/min.
<b>Mating Cycles</b>	10,000

### TYPE II SERIES 5620

Series 5620 is a memory card connector designed to comply with the Type II card standard of Compact Flash Association.

### TECHNICAL SPECIFICATIONS

<b>Number of Contacts:</b>	50
<b>Pitch:</b>	1.27mm (0.05) Grid
Tail Pitch:	0.635mm (0.025)
<b>Current Rating:</b>	0.5A Max.
<b>Voltage Rating:</b>	5V Max.
<b>DW Voltage:</b>	500V rms/min.
<b>Mating Cycles</b>	10,000



# Compact Flash Memory Card Connectors



## Series 5610/5620 Product Selection Guide

### CONNECTOR



H=2.0mm



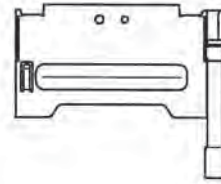
H=0mm



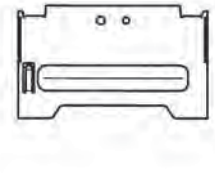
### EJECTOR



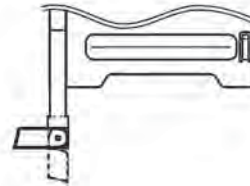
LEFT STRAIGHT BUTTON



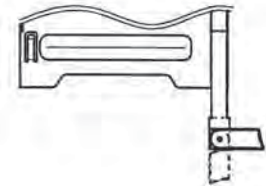
RIGHT STRAIGHT BUTTON



WITHOUT BUTTON



LEFT FOLDABLE BUTTON



RIGHT FOLDABLE BUTTON

### CONNECTOR

Stand Off	Keying	Connector	Page
Type I Height=0	Normal	<b>31 5610 050 500 871</b>	24, 25
	Reverse	<b>31 5610 050 550 871</b>	
Type I Height=2.0	Normal	<b>31 5610 050 210 871</b>	26, 27
	Reverse	<b>31 5610 050 260 871</b>	
Type II Height=0	Normal	<b>31 5620 050 116 871</b>	28
Type II Height=2.0	Reverse	<b>31 5620 050 716 871</b>	29

### CONNECTOR AND EJECTOR

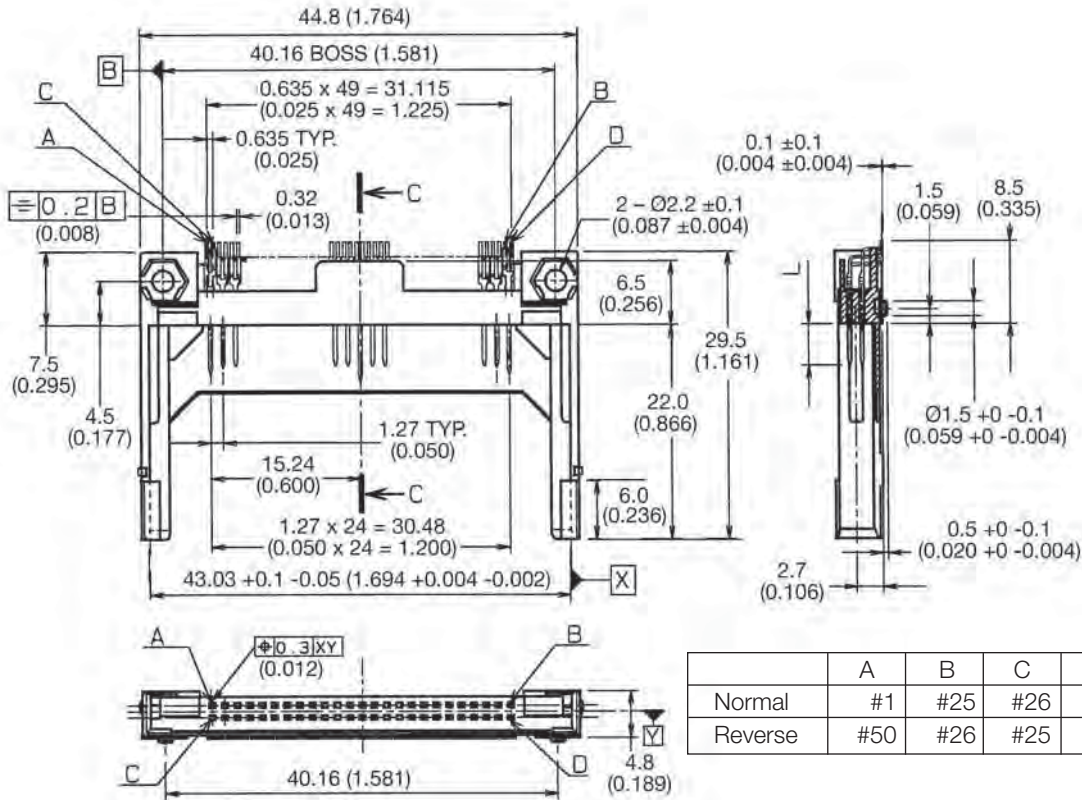
Connector Style		Ejector Style		How To Order		Page
Stand Off	Keying	Button Side		Connector	Ejector	
Type I Height=0	Normal	Straight	Left	<b>31 5610 050 500 871</b>	<b>30 5610 000 001 000</b>	24, 25
			Right	<b>31 5610 050 500 871</b>	<b>30 5610 000 002 000</b>	
		Foldable	Left	<b>31 5610 050 500 871</b>	<b>30 5610 000 005 000</b>	
			Right	<b>31 5610 050 500 871</b>	<b>30 5610 000 006 000</b>	
Type I Height=0	Reverse	Straight	Left	<b>31 5610 050 550 871</b>	<b>30 5610 000 001 000</b>	24, 25
			Right	<b>31 5610 050 550 871</b>	<b>30 5610 000 002 000</b>	
		Foldable	Left	<b>31 5610 050 550 871</b>	<b>30 5610 000 005 000</b>	
			Right	<b>31 5610 050 550 871</b>	<b>30 5610 000 006 000</b>	
Type I Height=2.0	Normal	Straight	Left	<b>31 5610 050 210 871</b>	<b>30 5610 000 001 000</b>	26, 27
			Right	<b>31 5610 050 210 871</b>	<b>30 5610 000 002 000</b>	
		Foldable	Left	<b>31 5610 050 210 871</b>	<b>30 5610 000 005 000</b>	
			Right	<b>31 5610 050 210 871</b>	<b>30 5610 000 006 000</b>	
Type I Height=2.0	Reverse	Straight	Left	<b>31 5610 050 260 871</b>	<b>30 5610 000 001 000</b>	26, 27
			Right	<b>31 5610 050 260 871</b>	<b>30 5610 000 002 000</b>	
		Foldable	Left	<b>31 5610 050 260 871</b>	<b>30 5610 000 005 000</b>	
			Right	<b>31 5610 050 260 871</b>	<b>30 5610 000 006 000</b>	
Type II Height=0	Normal	Straight	Left	<b>31 5620 050 116 871</b>	<b>30 5620 000 001 000</b>	28
			Right	<b>31 5620 050 116 871</b>	<b>30 5620 000 002 000</b>	
		Foldable	Left	<b>31 5620 050 116 871</b>	<b>30 5620 000 005 000</b>	
			Right	<b>31 5620 050 116 871</b>	<b>30 5620 000 006 000</b>	
Type II Height=2.0	Reverse	Straight	Left	<b>31 5620 050 716 871</b>	<b>30 5620 000 001 000</b>	29
			Right	<b>31 5620 050 716 871</b>	<b>30 5620 000 002 000</b>	
		Foldable	Left	<b>31 5620 050 716 871</b>	<b>30 5620 000 005 000</b>	
			Right	<b>31 5620 050 716 871</b>	<b>30 5620 000 006 000</b>	

# Compact Flash Memory Card Connectors

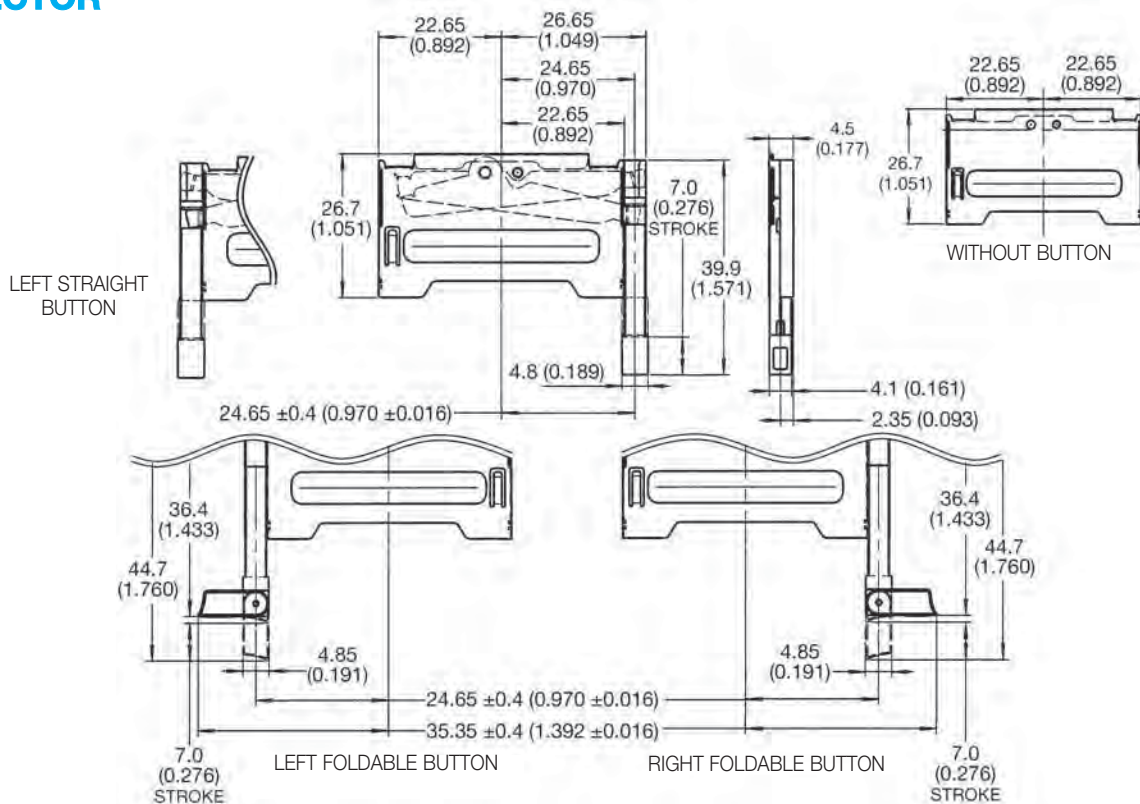


## Series 5610 Header/Ejector Assembly H=0mm

### CONNECTOR



### EJECTOR



See page 23 for How To Order

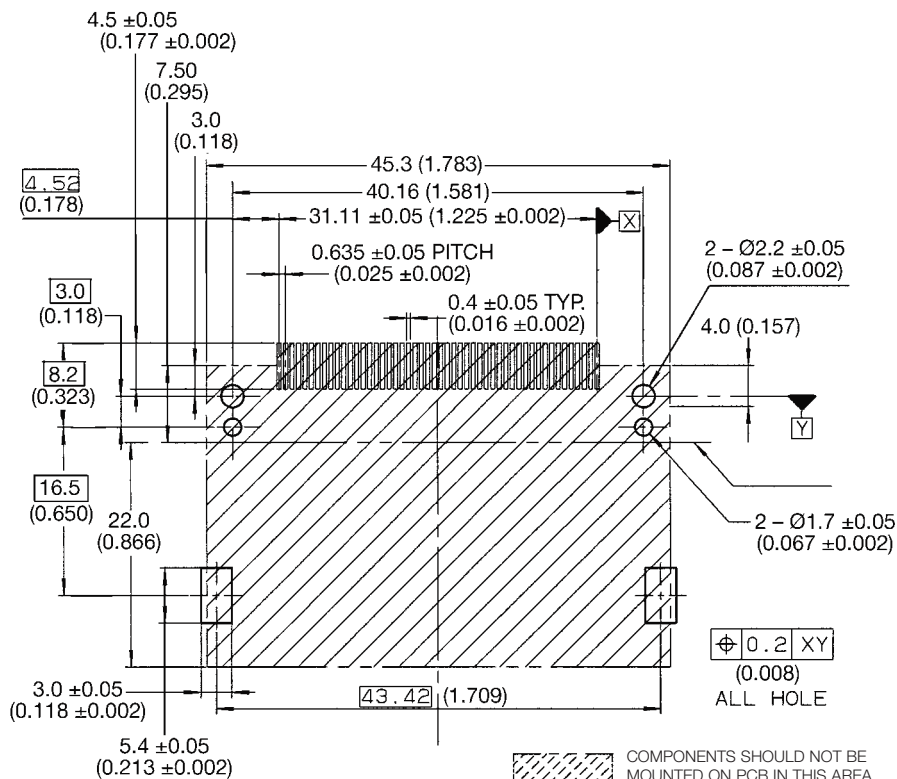
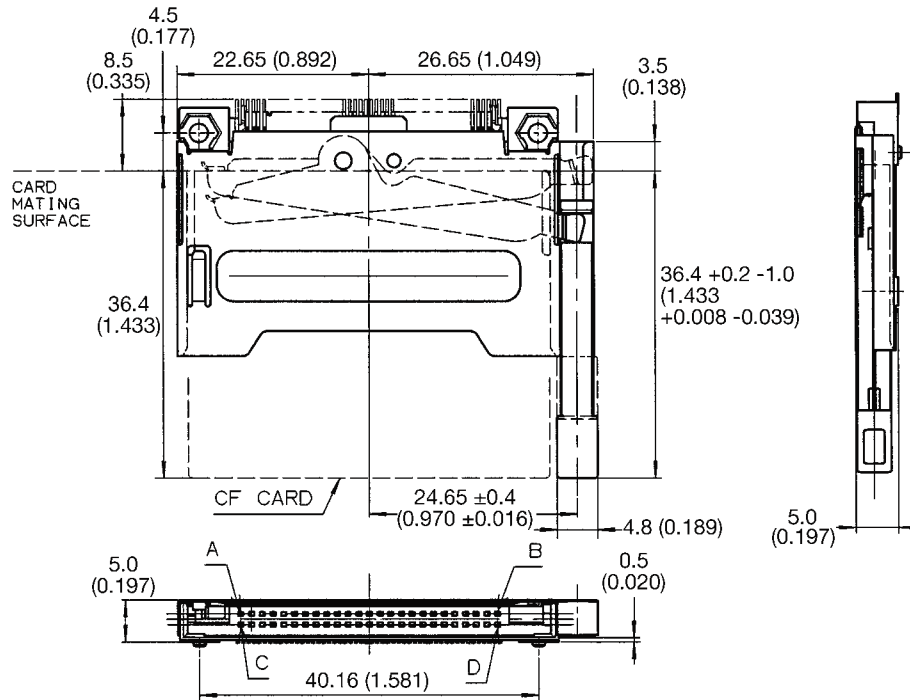


# Compact Flash Memory Card Connectors



## Series 5610 Header/Ejector Assembly H=0mm

### ASSEMBLY



RECOMMENDED PRINTED CIRCUIT LAYOUT

Height	Boss	Key	How To Order
H=0	0.5	Normal	<b>31 5610 050 500 871</b>
		Reverse	<b>31 5610 050 550 871</b>

	A	B	C	D
Normal	#1	#25	#26	#50
Reverse	#50	#26	#25	#1

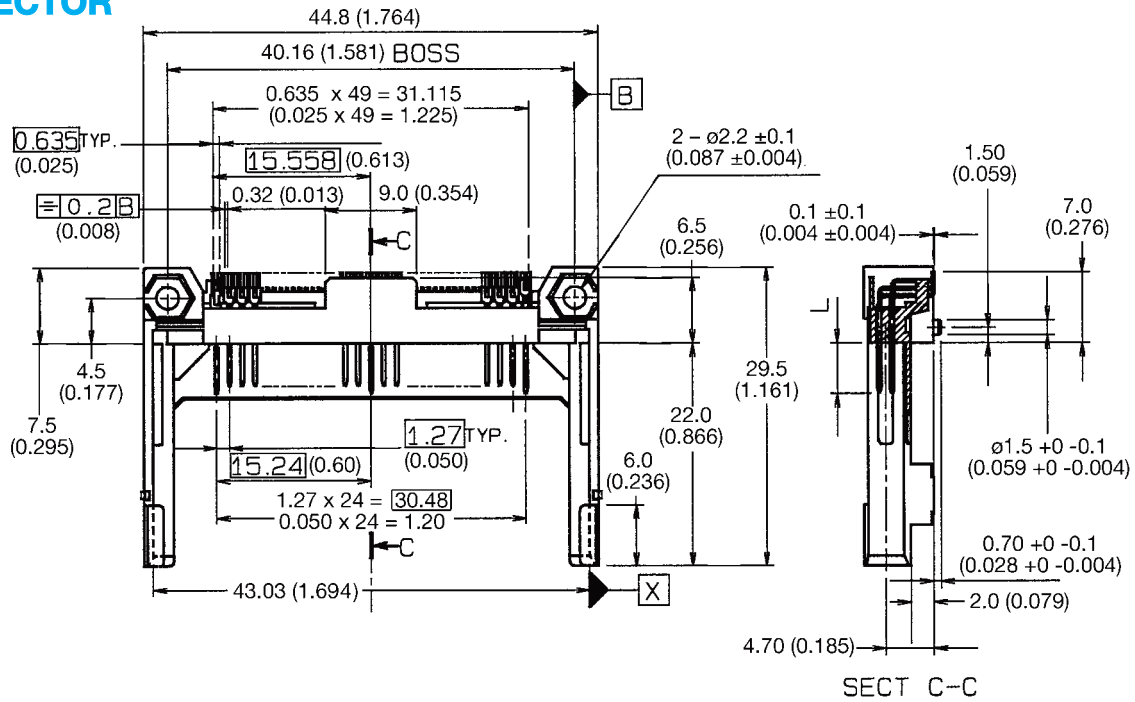


# Compact Flash Memory Card Connectors

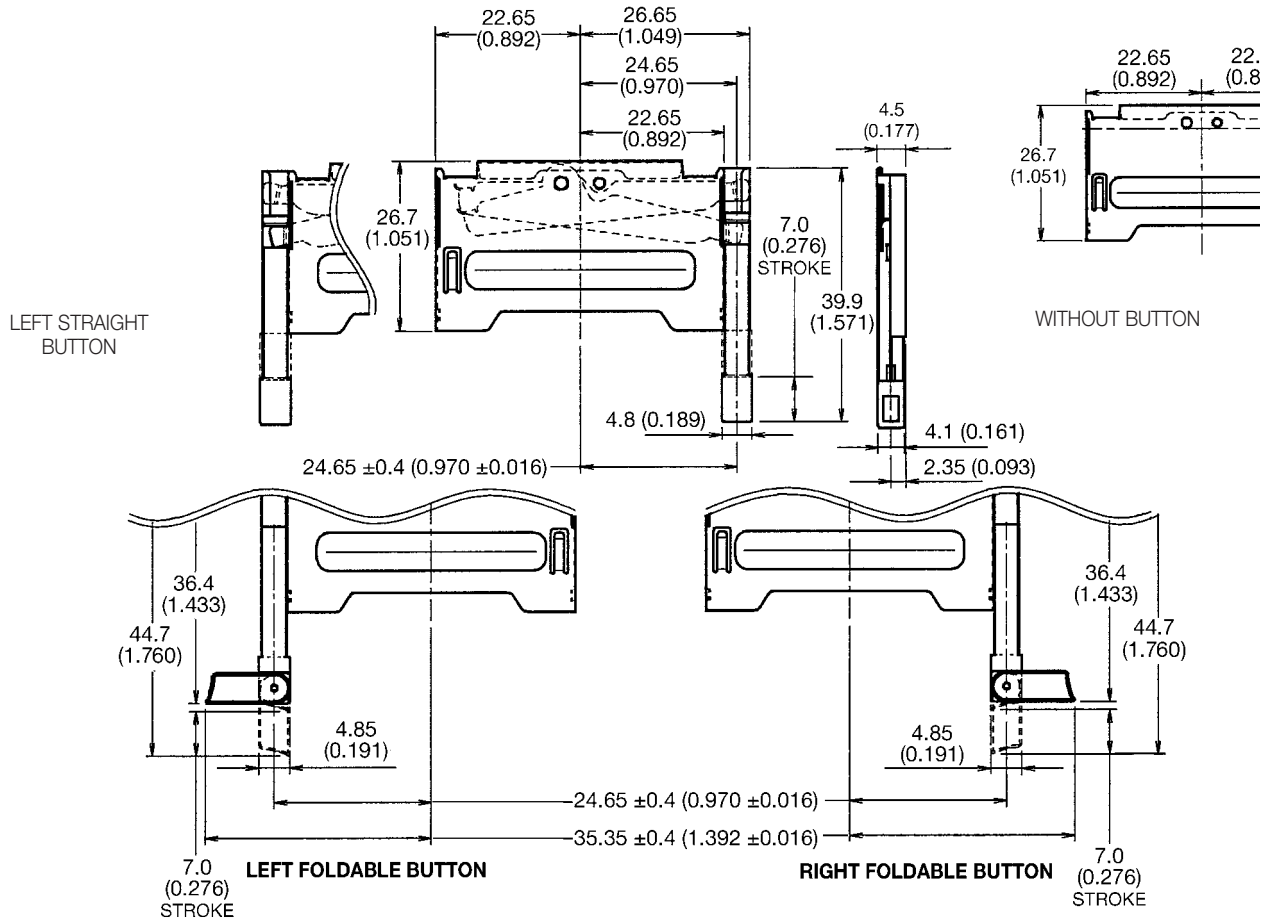


## Series 5610 Header/Ejector Assembly H=2mm

### CONNECTOR



### EJECTOR



See page 23 for How To Order

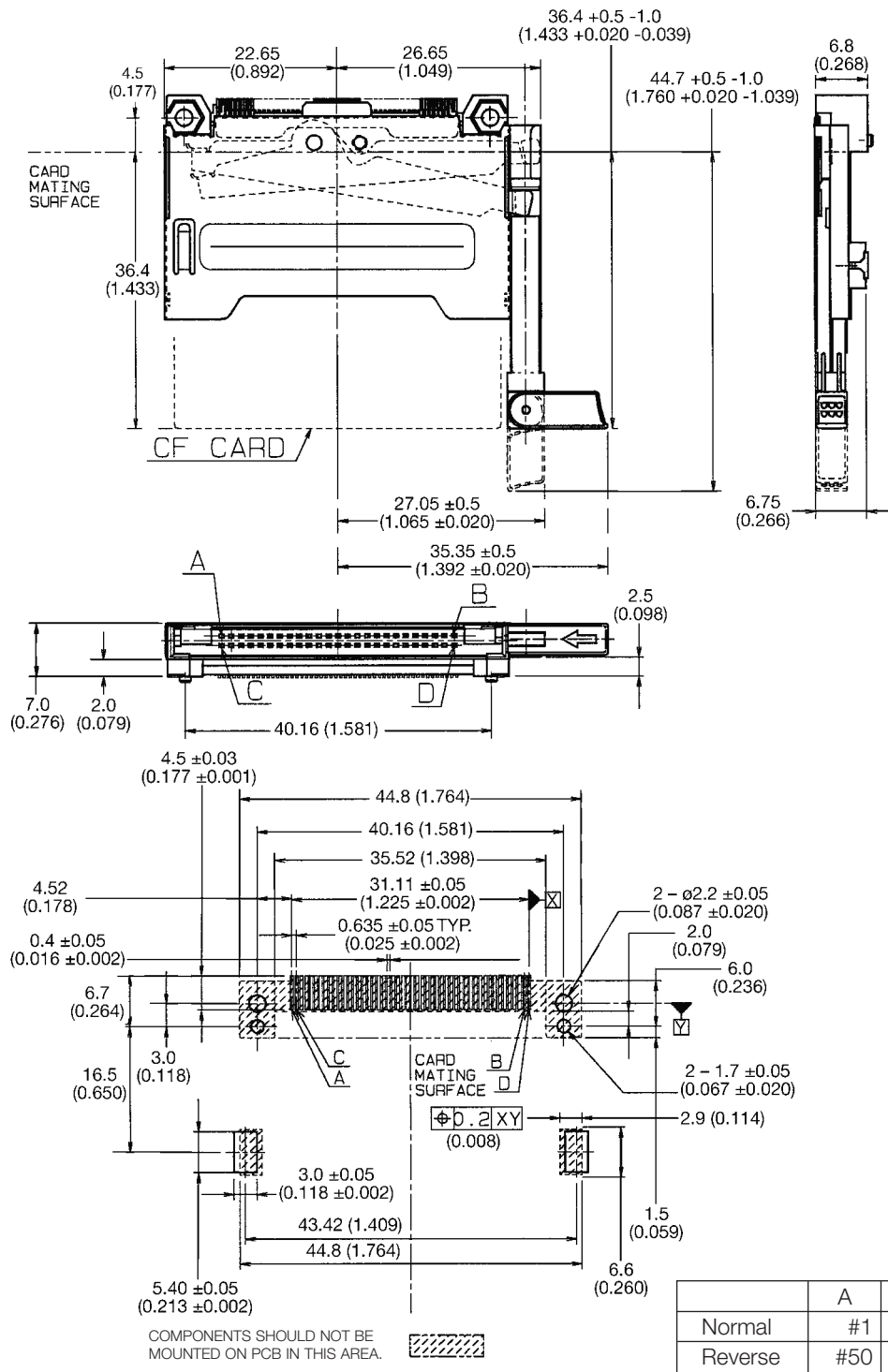


# Compact Flash Memory Card Connectors



## Series 5610 Header/Ejector Assembly H=2mm

### ASSEMBLY



RECOMMENDED PRINTED CIRCUIT LAYOUT

CONNECTOR			
Height	Boss	Key	How To Order
H=2.2	0.7	Normal	<b>31 5610 050 210 871</b>
		Reverse	<b>31 5610 050 260 871</b>



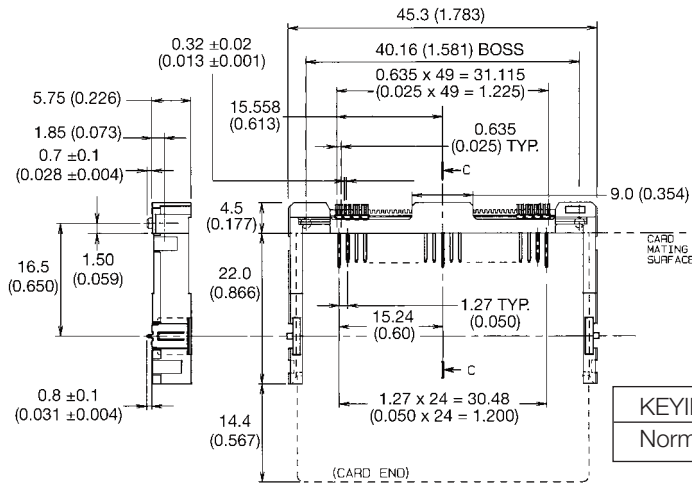


# Compact Flash Memory Card Connectors



## Series 5620 Header/Ejector Assembly H=0mm

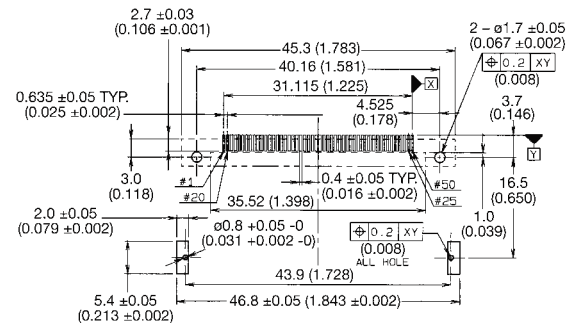
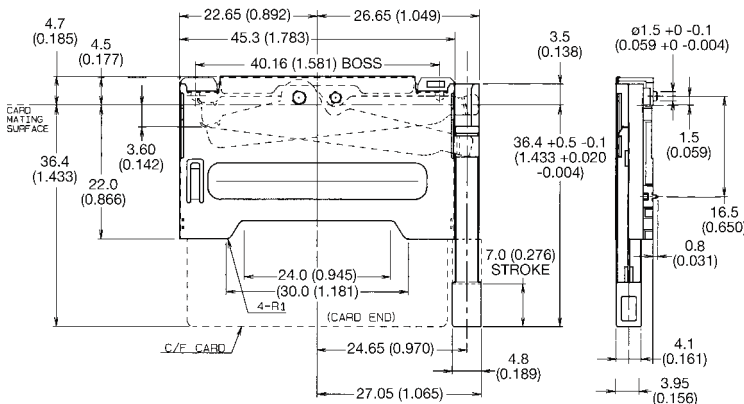
### CONNECTOR



Description	Pin Number	0.10
Power	1, 13, 38, 50	5.00
General	All other pins	4.25
Detect	25, 26	3.50

KEYING	A	B	C	D	E	F	G	H
Normal	1.4	0.78	1	13	25	26	38	50

### ASSEMBLY



RECOMMENDED PRINTED CIRCUIT LAYOUT

### CONNECTOR HOW TO ORDER

31 5620 050 116 871

### EJECTOR HOW TO ORDER

30 5620 000 XXX 000

Variation Code  
See page 23

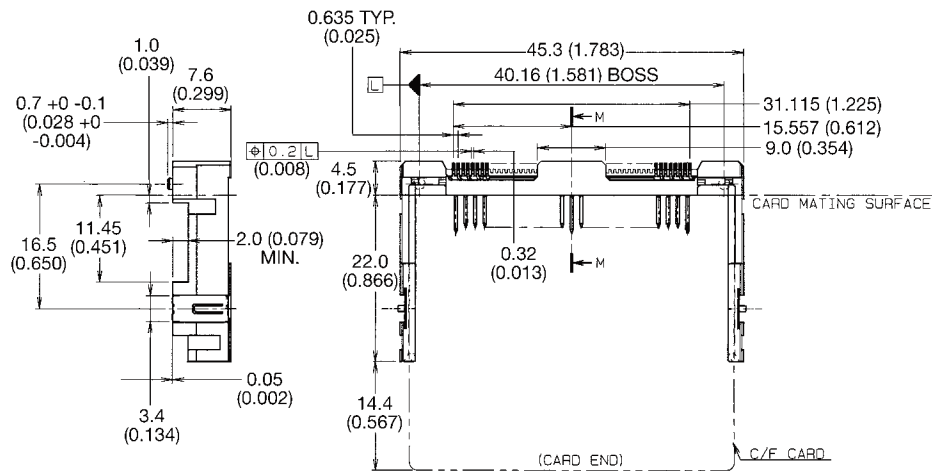


# Compact Flash Memory Card Connectors



## Series 5620 Header/Ejector Assembly H=2mm

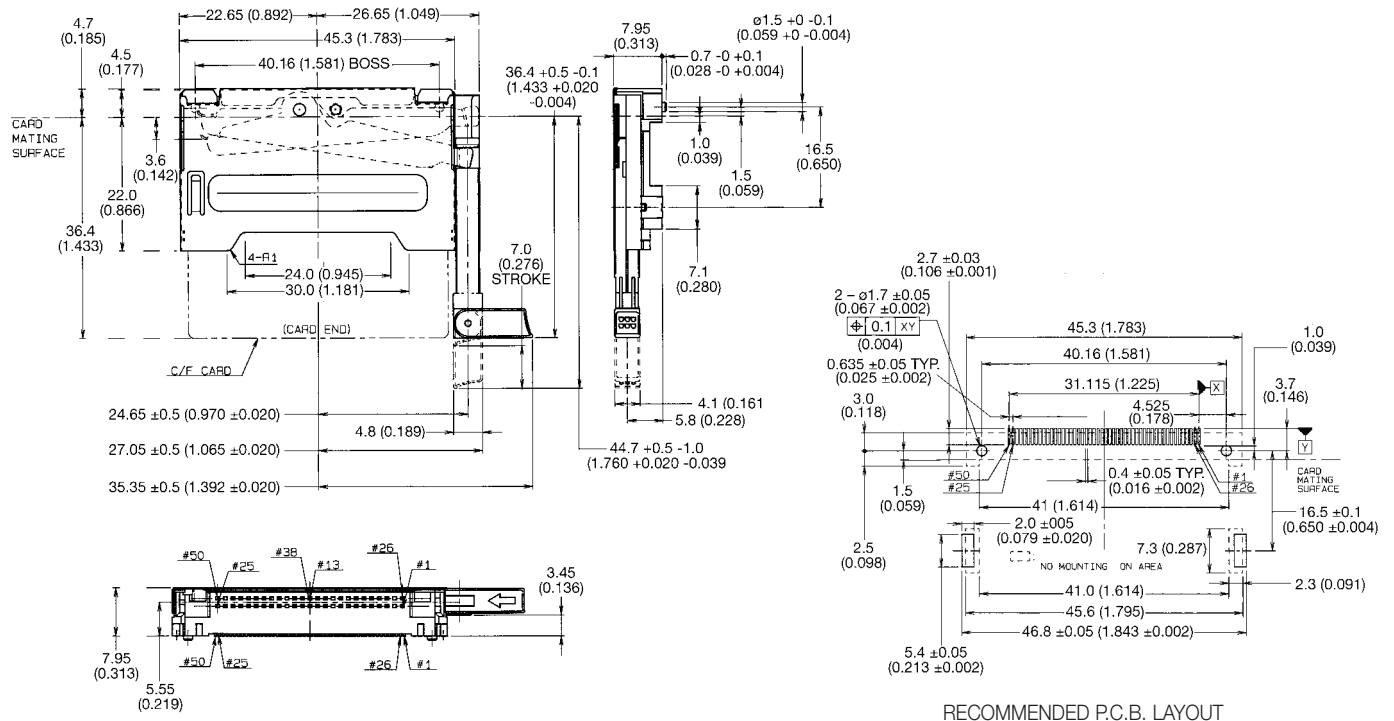
### CONNECTOR



Description	Pin Number	0.10
Power	1, 13, 38, 50	5.00
General	All other pins	4.25
Detect	25, 26	3.50

KEYING	A	B	C	D	E	F	G	H
Normal	0.78	1.4	50	38	26	25	13	1

### EJECTOR ASSEMBLY



### CONNECTOR HOW TO ORDER

31 5620 050 716 871

Variation Code  
See page 23

### EJECTOR HOW TO ORDER

30 5620 000 002 000

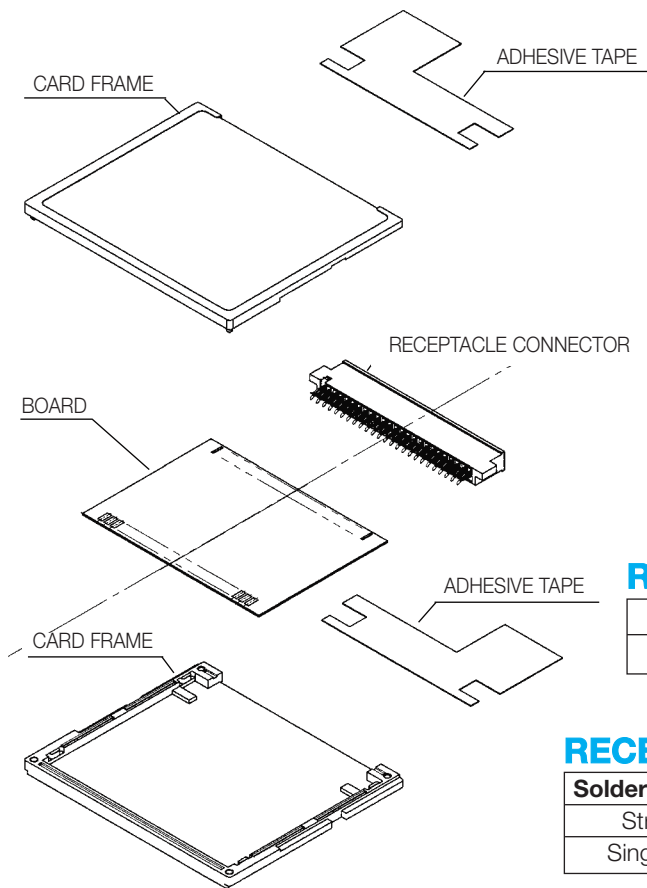
Variation Code  
See page 23



# Compact Flash Memory Card Connectors



## Series 5611/5612 How To Order



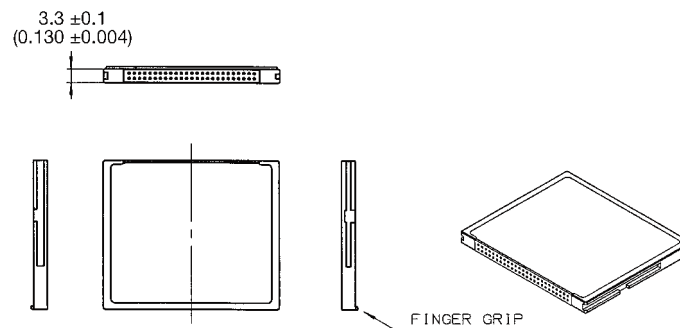
### RECOMMENDED PRINTED CIRCUIT LAYOUT

KEYING	A	B	C	D	E	F	G	H
Normal	1.4	0.78	1	13	25	26	38	50

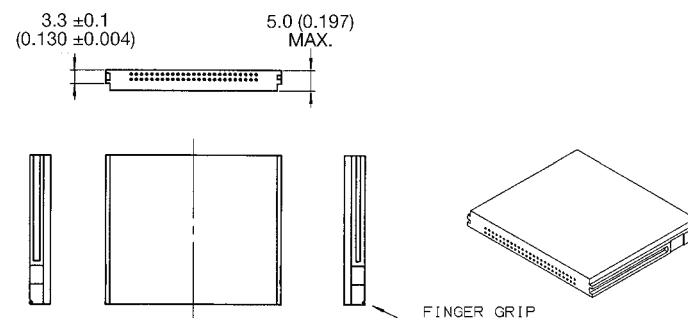
### RECEPTACLE CONNECTOR SERIES 5611

Solder Tail Style	How To Order	Pkg. Qty.	Page
Straddle	<b>20 5611 050 113 871</b>	Semi-Hard Tray/60 pcs	32
Single Side	<b>24 5611 050 214 061</b>	Tape and Reel/1000 pcs	32

### TYPE I



### TYPE II



TYPE II CARD KIT  
is not available now.

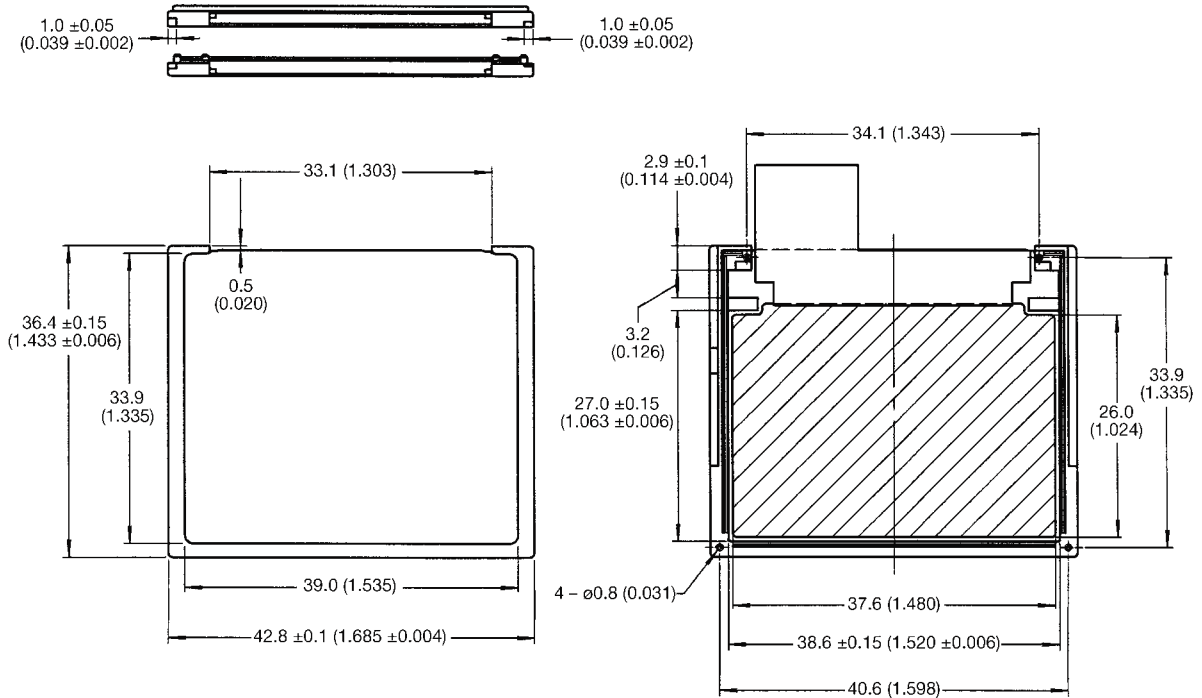


# Compact Flash Memory Card Connectors

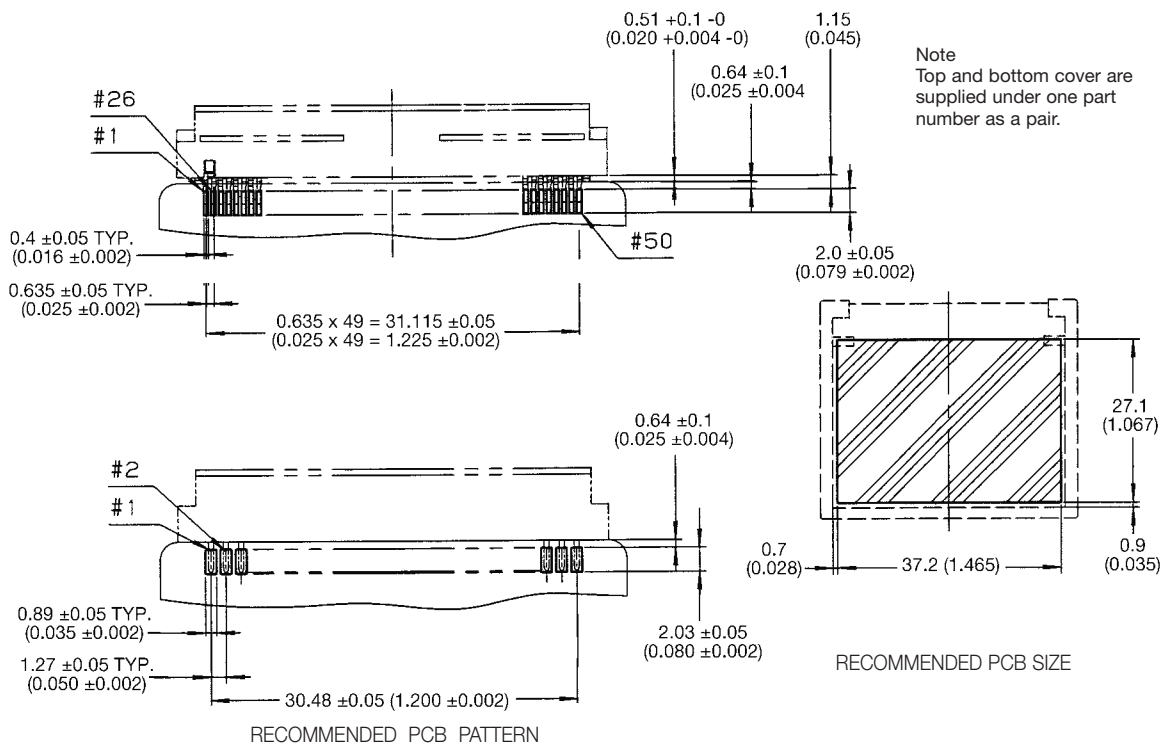


## Series 5612 TYPE I Card Kit Covers

### SERIES 5612 CARD KIT



	How To Order	Pkg. Qty.
With Insulating Tape	<b>10 5612 100 000 011</b>	24 pcs/Tray 240 pcs/Box

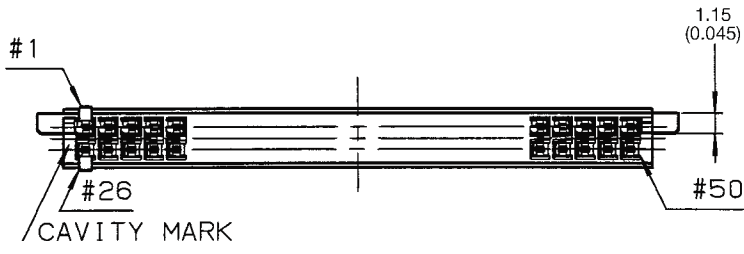
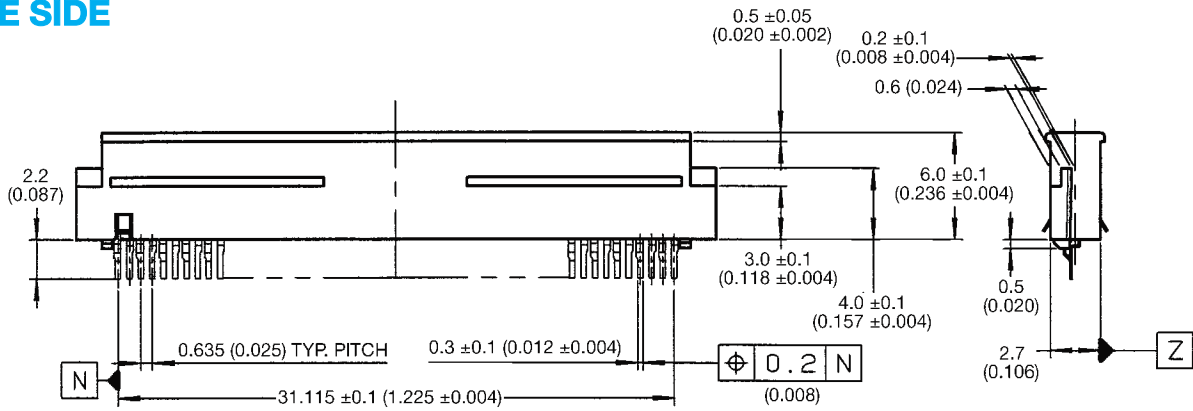


# Compact Flash Memory Card Connectors



## Series 5611 Receptacle Connector

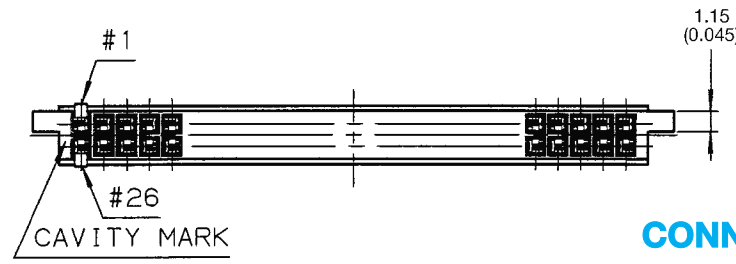
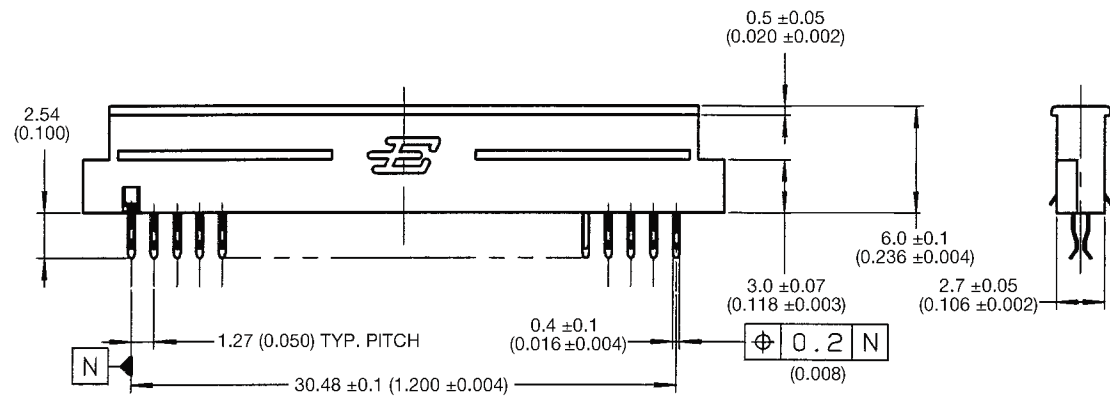
### SINGLE SIDE



### CONNECTOR HOW TO ORDER

24 5611 050 214 061

### STRADDLE TAIL



### CONNECTOR HOW TO ORDER

20 5611 050 113 871

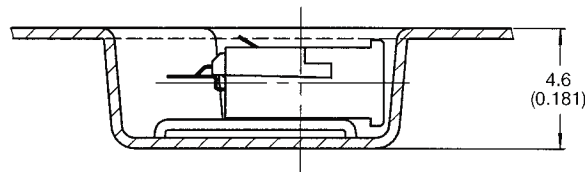
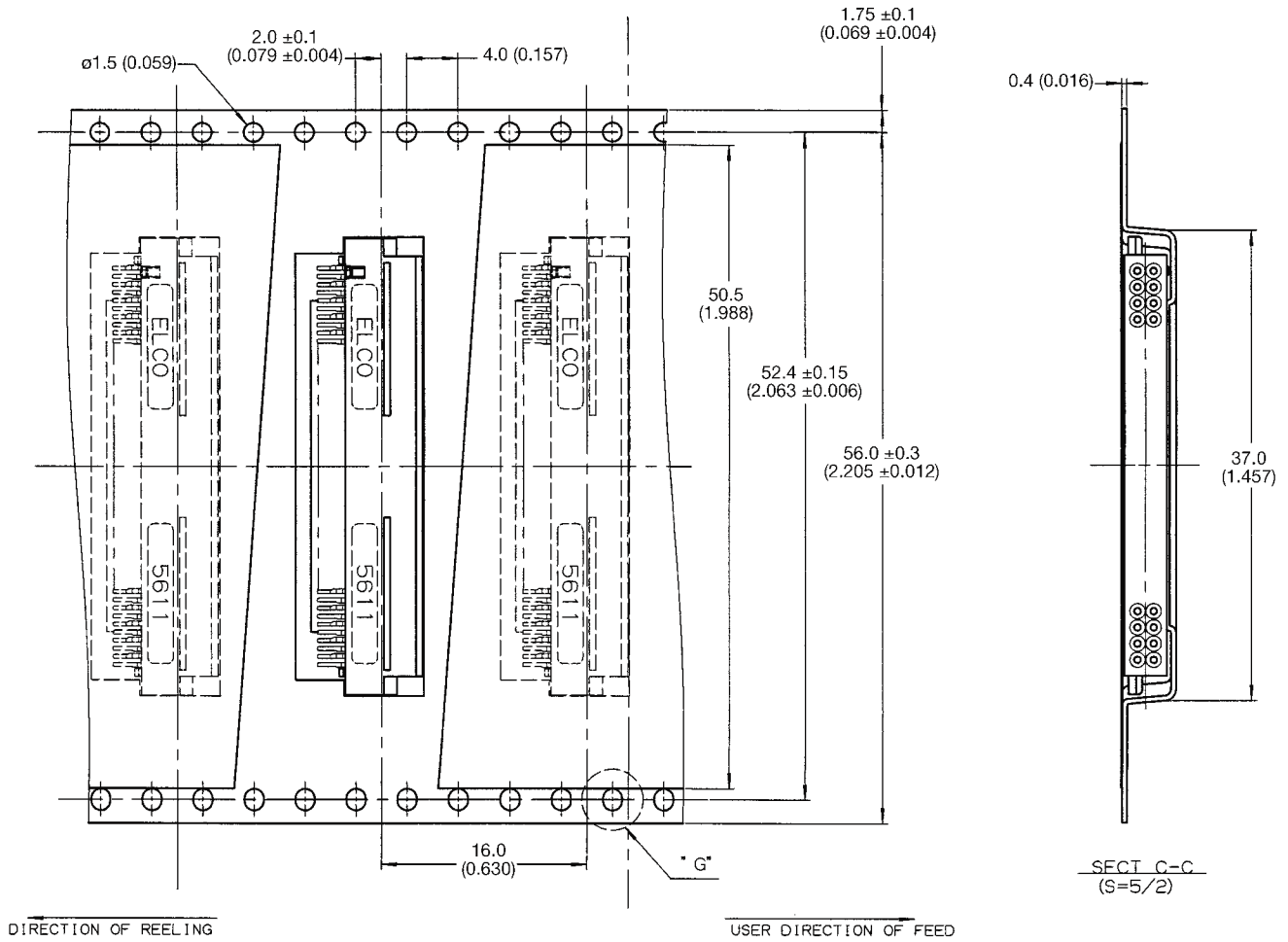


# Compact Flash Memory Card Connectors



## Series 5611 Receptacle Connector Package

### TAPE AND REEL PACKAGE



### CONNECTOR HOW TO ORDER

24 5611 050 XXX XXX

113 Straddle 871  
214 Single Side 061

1000 pieces per Tape and Reel





# Multi Media Card Connectors



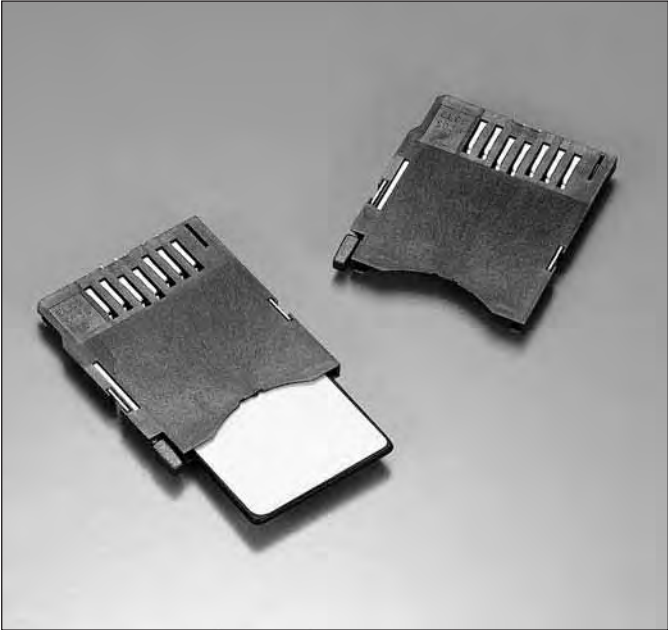
## Features/Benefits

### SERIES 5038

Series 5038 is the MMC (Multi Media Card) Connector developed to comply with the requirement of high-density mounting in the market and designed especially for the slim type Note PC and Portable equipment.

### FEATURES

- SMT, Single, Reverse Type
- Correspond to the size of MMC Card (32mm (1.260) x 24mm (0.945) x 1.4mm (0.055))
- Both ejector and without ejector type available
- Ejector type achieves easy insertion and separation of card
- Low-profile of as much as 2.6mm (0.102)
- Adoption of guide rail type which prevents the direct contact of card on the board for the low-profile design
- High durability for 10,000 cycles insertion/separation



### TECHNICAL SPECIFICATIONS

<b>Number of Contacts:</b>	7P
<b>Pitch:</b>	2.5mm (0.098)
<b>Current Rating:</b>	AC0.5A Max. DC0.5A Pin
<b>Voltage Rating:</b>	AC5V DC5V Pin
<b>DW Voltage:</b>	500V rms/min.
<b>Mating Cycles</b>	10,000

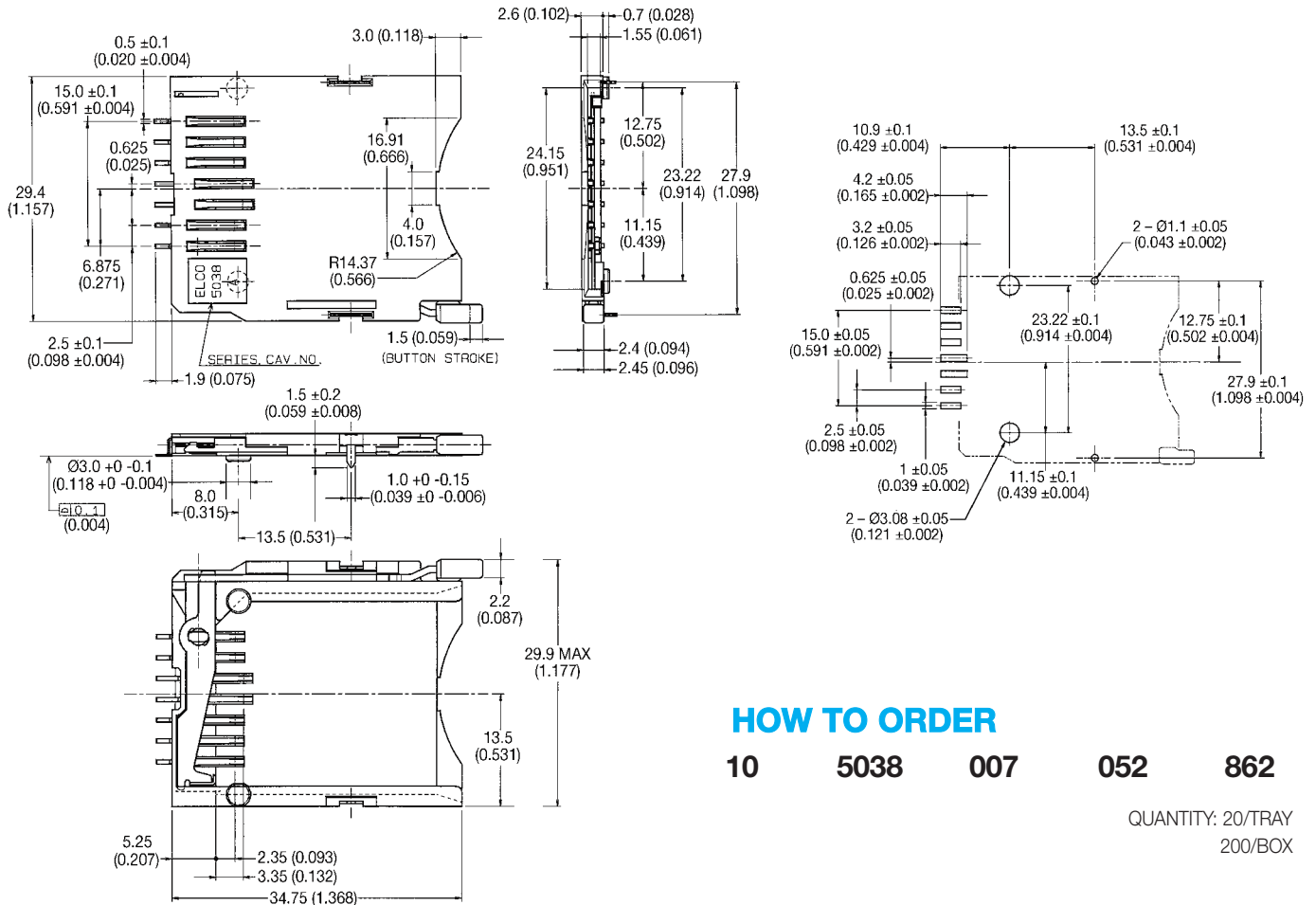
### PRODUCT SELECTION GUIDE

Keying	Ejector Style		How To Order	Page
Reverse	With ejector	Reflow pin type	<b>10 5038 007 052 862</b>	35
	Without ejector	Reflow pin type	<b>10 5038 007 252 862</b>	36
		SMT Type	<b>10 5038 007 251 862</b>	36
	Push/Push ejector	Reflow pin type	<b>10 5038 007 353 862</b>	37
		SMT Type	<b>10 5038 007 354 862</b>	37



# Multi Media Card Connectors

## Series 5038 With Ejector

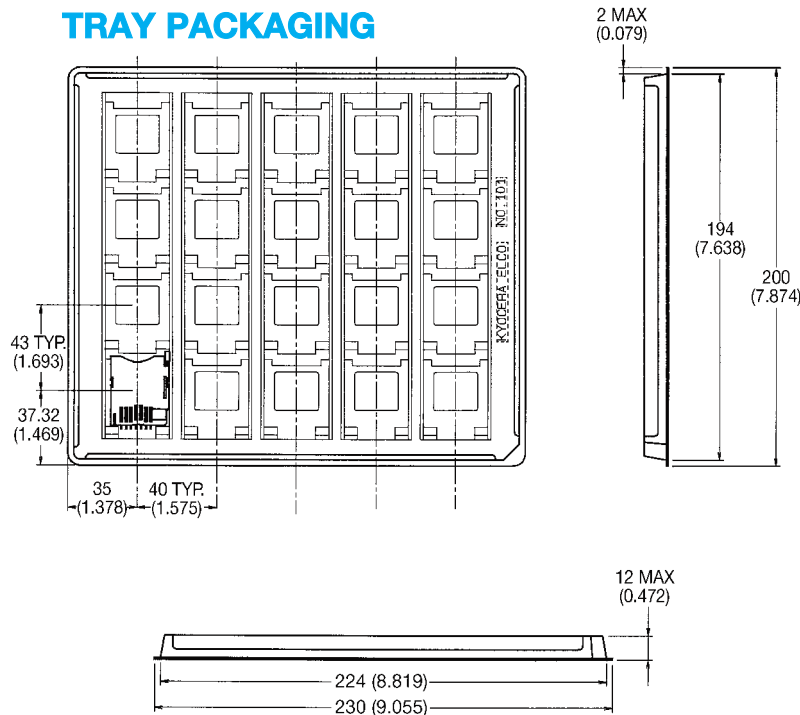


### HOW TO ORDER

**10 5038 007 052 862**

QUANTITY: 20/TRAY  
200/BOX

### TRAY PACKAGING

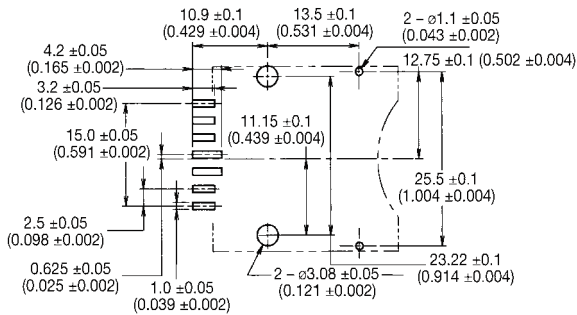
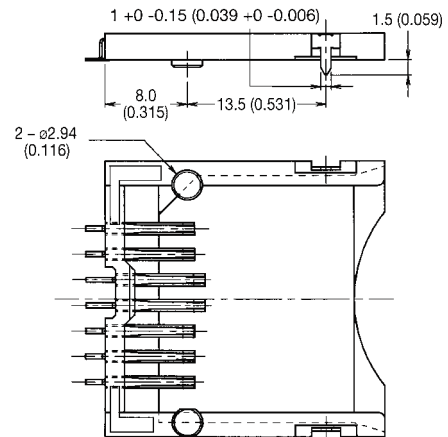
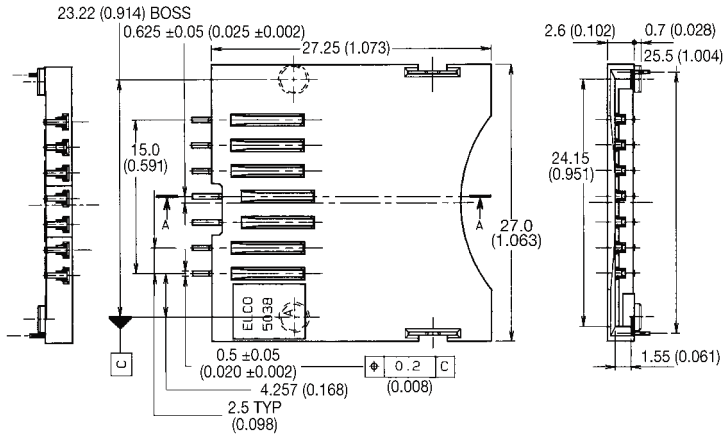


# Multi Media Card Connectors



## Series 5038 Without Ejector

### REFLOW PIN TYPE

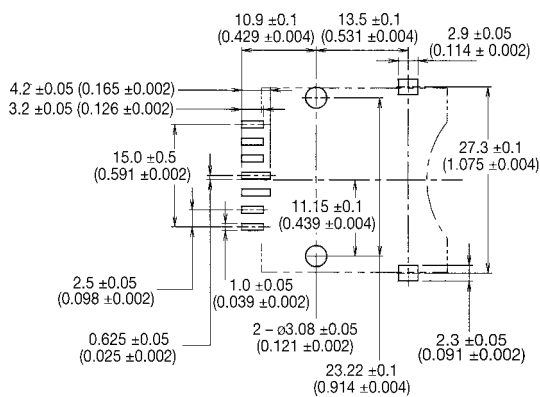
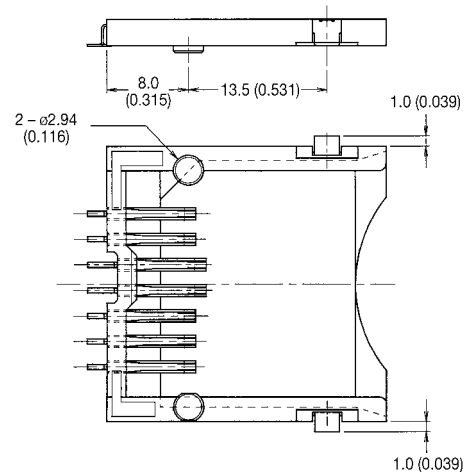
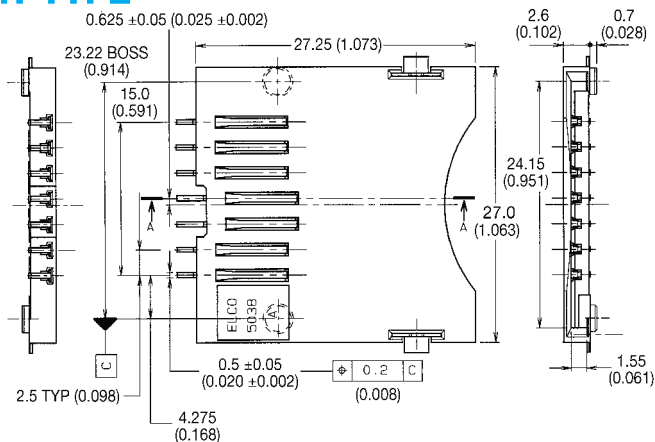


### HOW TO ORDER

10 5038 007 252 862

QUANTITY: 25/TRAY  
250/BOX

### SMT TYPE



### HOW TO ORDER

10 5038 007 251 862

QUANTITY: 25/TRAY  
500/BOX

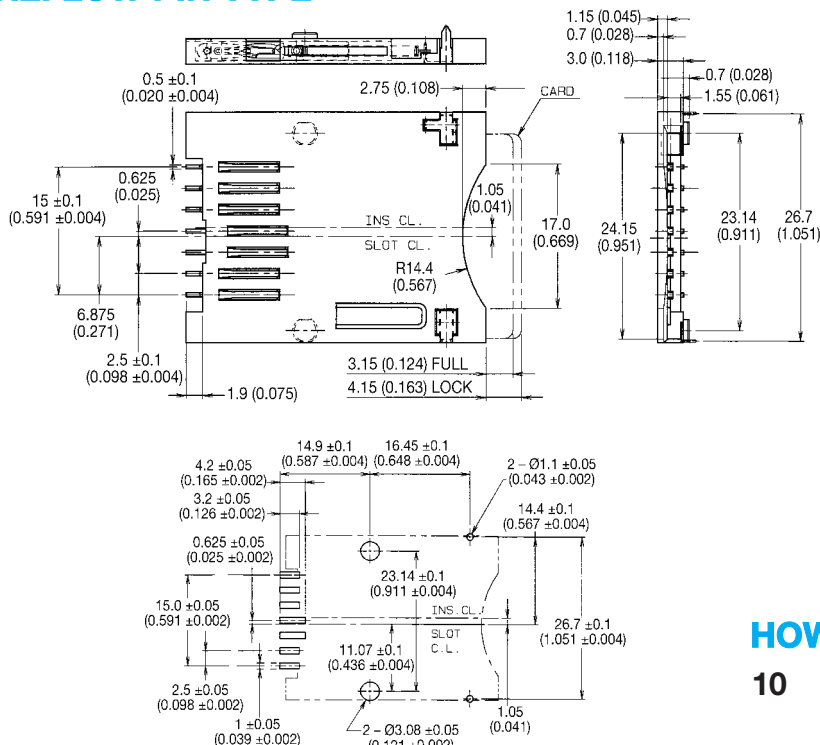


# Multi Media Card Connectors

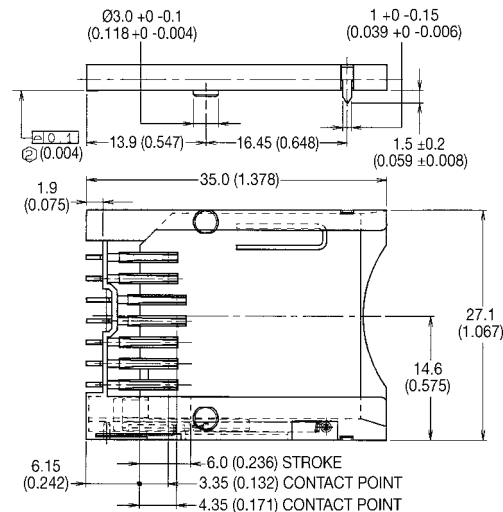


## Series 5038 Spring Eject Type

### REFLOW PIN TYPE



RECOMMENDED PC BOARD LAYOUT

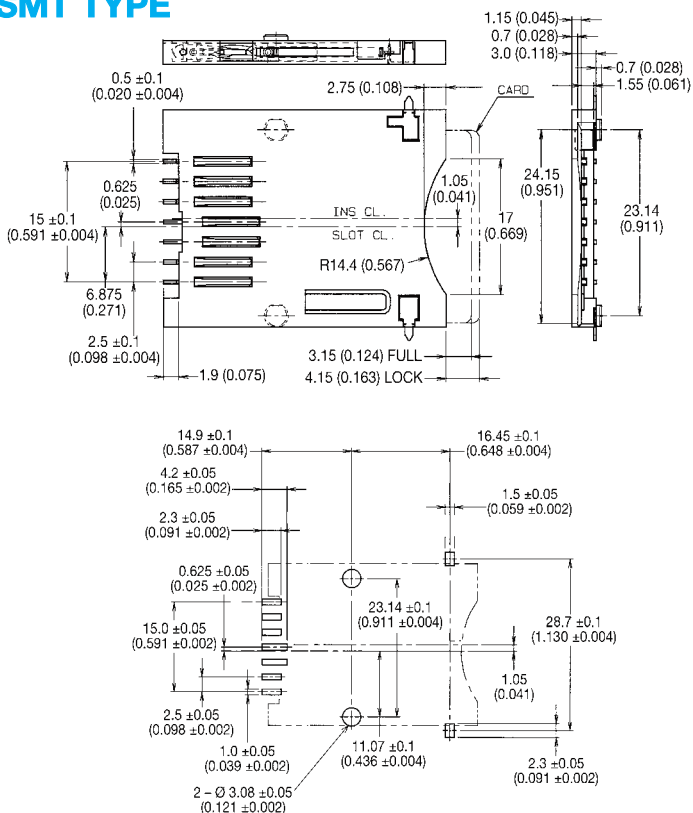


### HOW TO ORDER

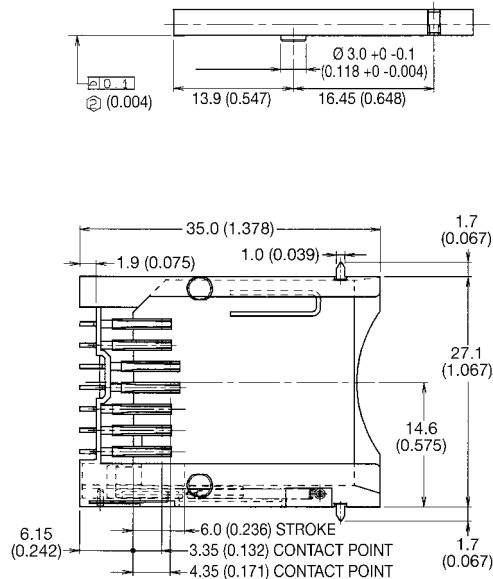
10 5038 007 353 862

QUANTITY: 25/TRAY  
250/BOX

### SMT TYPE



RECOMMENDED PC BOARD LAYOUT



### HOW TO ORDER

10 5038 007 354 862

QUANTITY: 20/TRAY  
400/BOX



# Secure Digital Memory Card Connectors



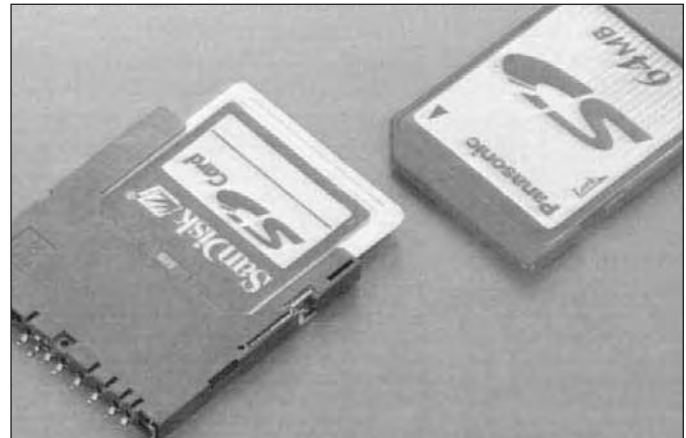
## Features/Benefits

### SERIES 5638

SD (Secure Digital) Memory Card technology is emerging as the next industry standard for removable flash memory and input/output devices. AVX has developed a complete range of top and bottom mount connectors with and without ejector features for such applications as MP3 Players, PDAs, Cellular Phones, Digital Cameras, Digital Camcorder, etc.

### FEATURES

- Conforms to SDA (Secure Digital Association) requirements
- Low profile 2.9mm height
- Integral guide rails
- Location boss's and solder tabs
- Normal and reverse keying
- Card detection feature
- Accepts both SD and Multimedia Cards
- Tape and reel packaging
- Mating cycles 10,000



### ELECTRICAL CHARACTERISTICS

Current Rating: 0.5A  
Voltage Rating: 5V  
Insulation Resistance: 1000M $\Omega$  min.  
Contact Resistance: 40m $\Omega$  max.  
DW Voltage: AC 500V

### CLIMATIC CHARACTERISTICS

Operating Temperature: -25°C to +90°C

### PRODUCT SELECTION GUIDE

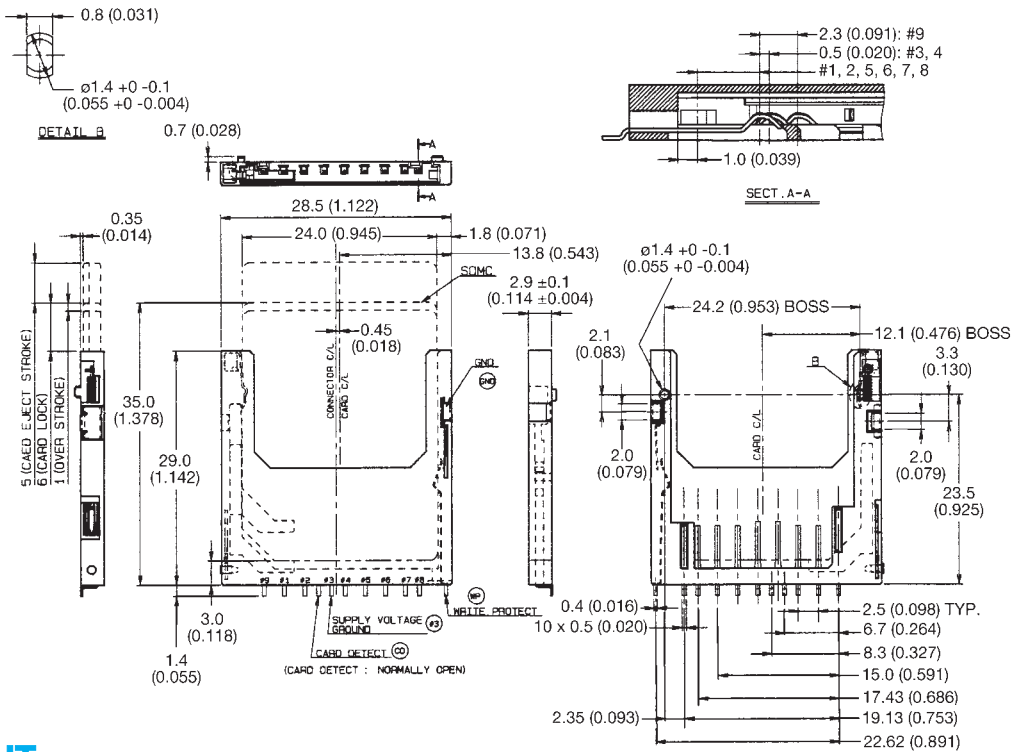
Keying	PCB Mounting	Height	Ejector Style	How To Order	Page
Normal	Top	2.9mm	Push/Push Ejector	<b>14 5638 009 511 862</b>	39
Reverse	Bottom	2.9mm	Push/Push Ejector	<b>14 5638 109 511 862</b>	40
Normal	Top	2.9mm	Without Ejector	<b>14 5638 009 211 862</b>	41
Reverse	Bottom	2.9mm	Without Ejector	<b>14 5638 109 211 862</b>	42

# Secure Digital Memory Card Connectors

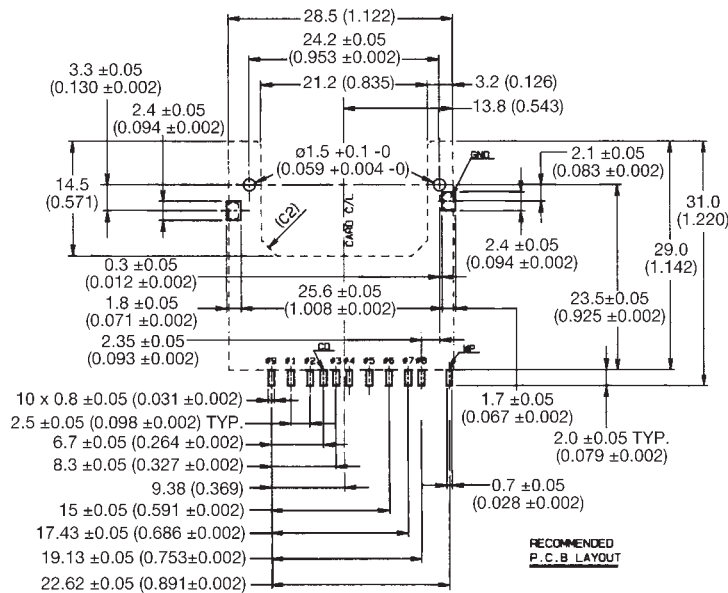


## Series 5638 Spring Eject Type

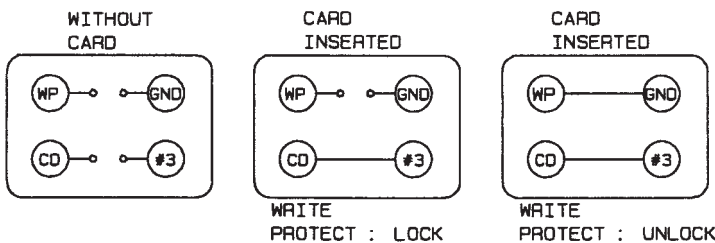
### NORMAL



### PCB LAYOUT



### CIRCUIT



### HOW TO ORDER

14 5638 009 511 862

250 pieces per Tape and Reel

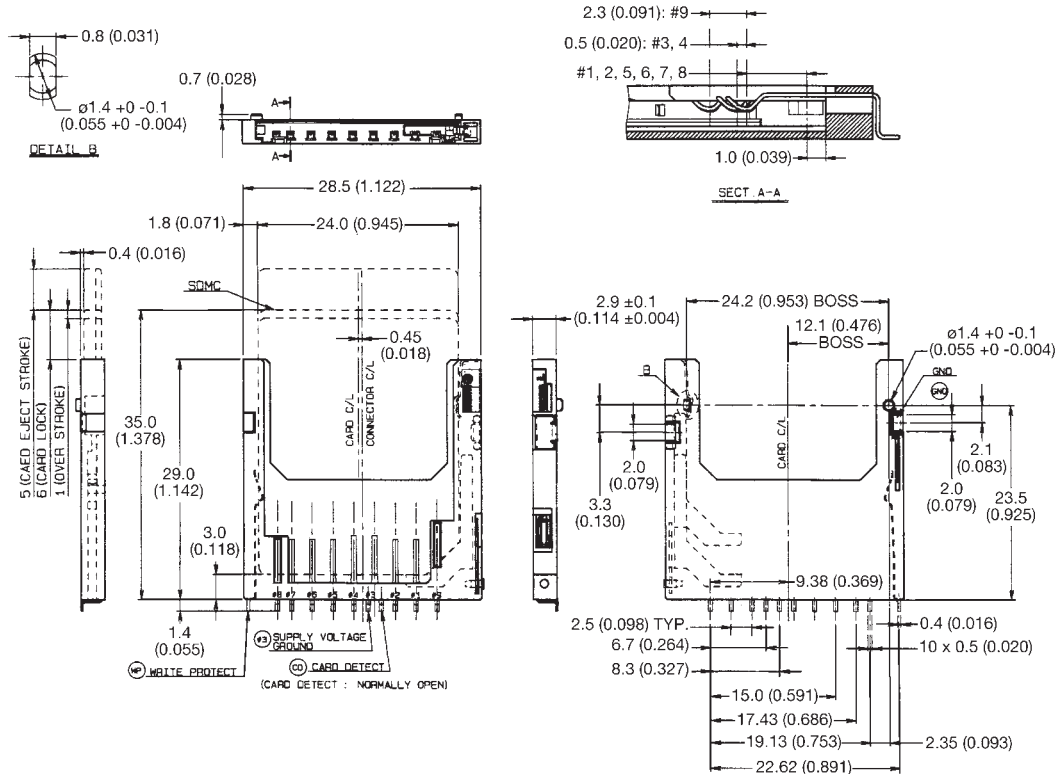


# Secure Digital Memory Card Connectors

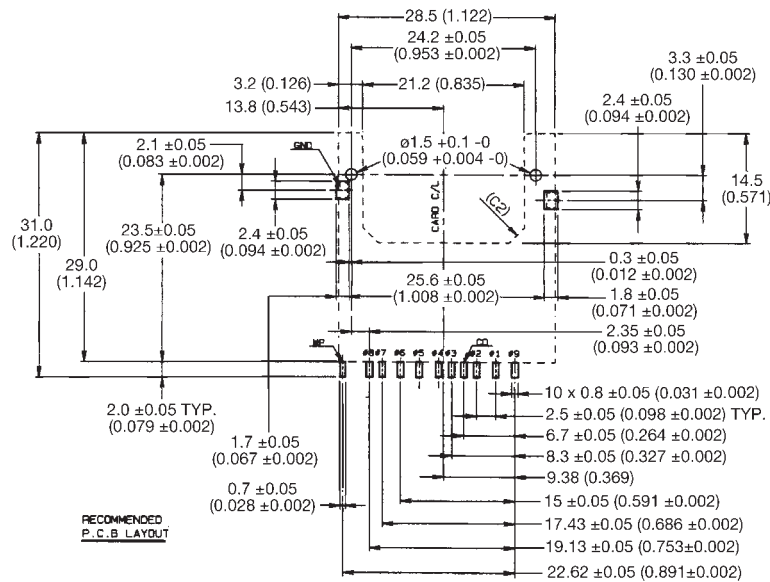


## Series 5638 Spring Eject Type

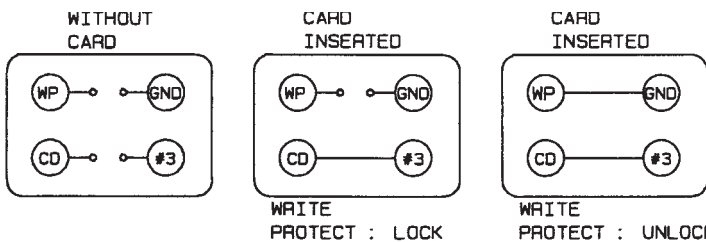
### REVERSE



### PCB LAYOUT



### CIRCUIT



### HOW TO ORDER

14 5638 109 511 862

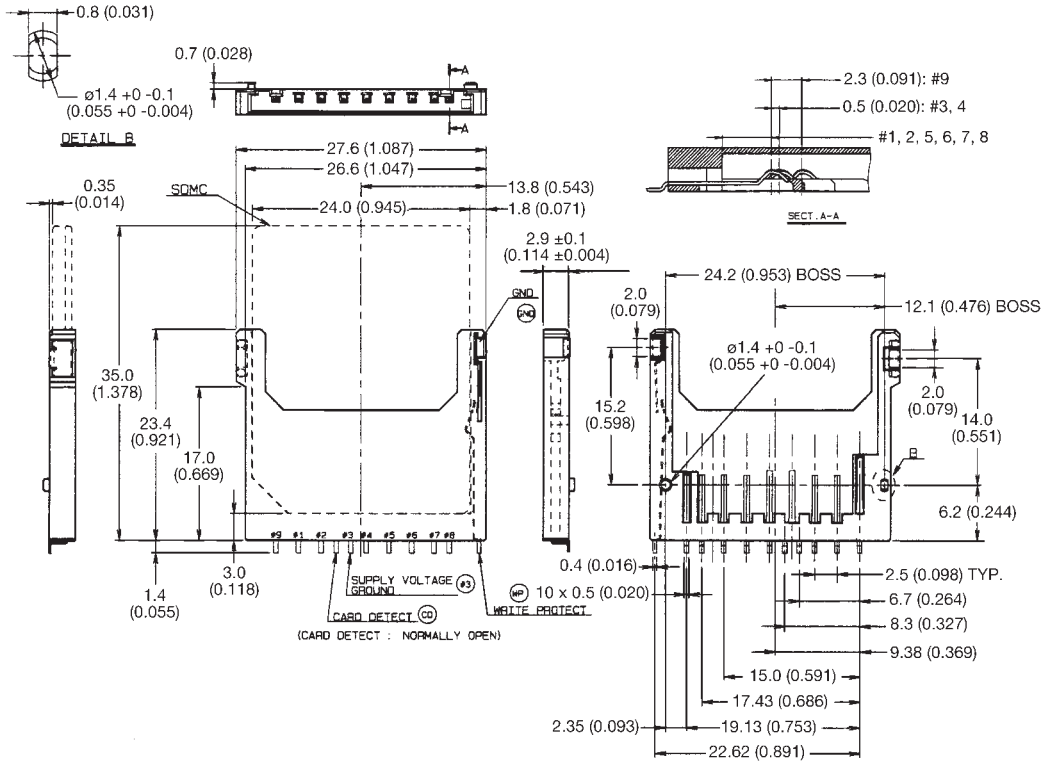
250 pieces per Tape and Reel

# Secure Digital Memory Card Connectors

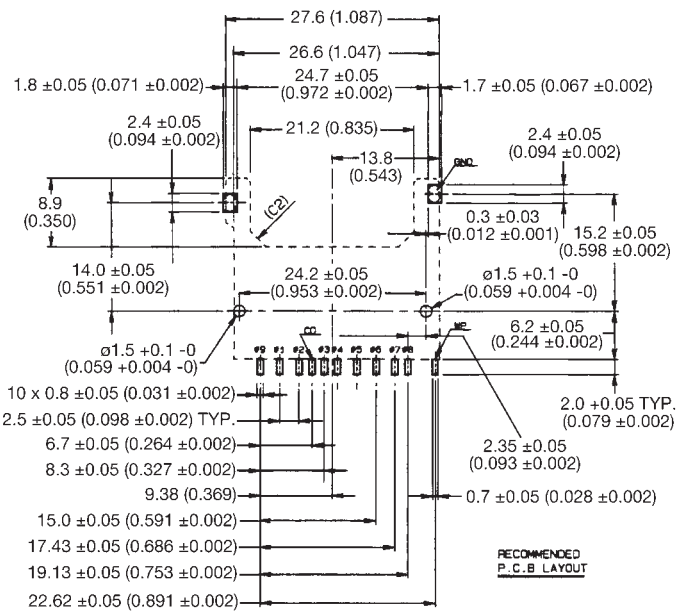


## Series 5638 Without Eject Type

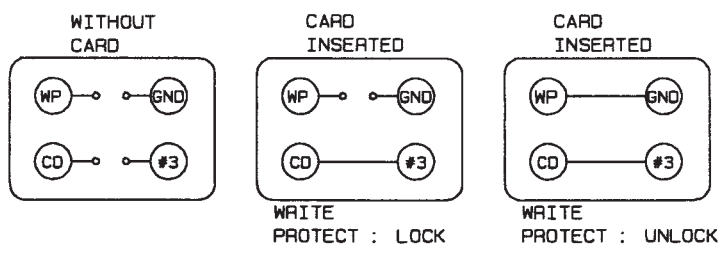
### NORMAL



### PCB LAYOUT



### CIRCUIT



### HOW TO ORDER

14 5638 009 211 862  
 250 pieces per Tape and Reel



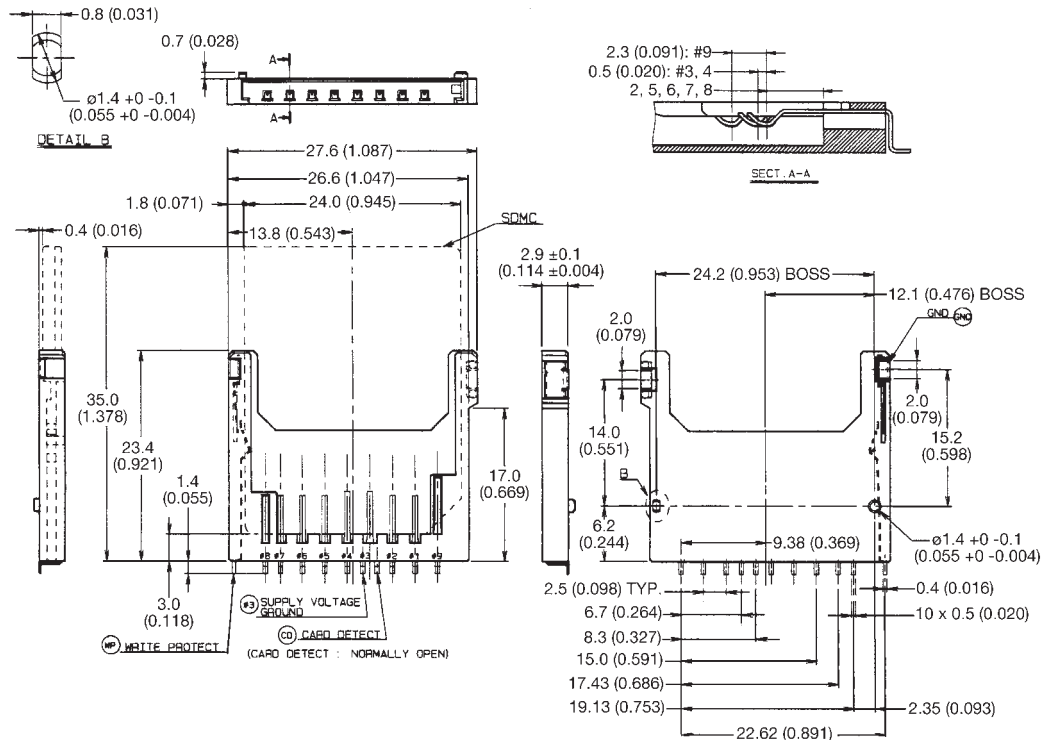


# Secure Digital Memory Card Connectors

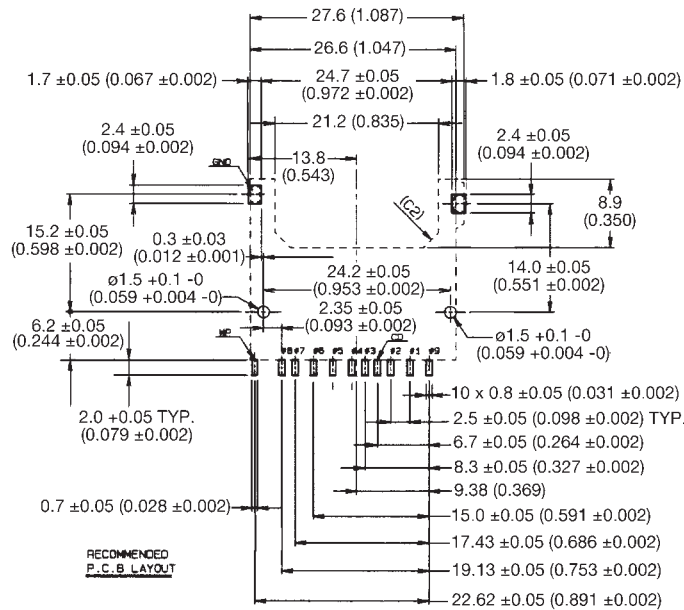


## Series 5638 Without Eject Type

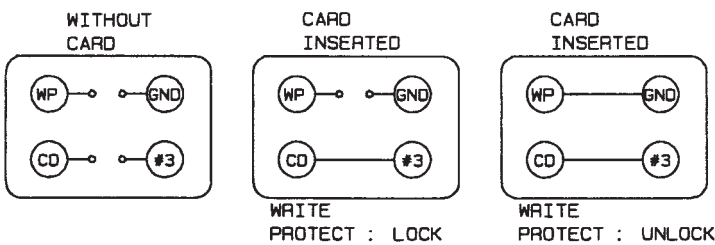
### REVERSE



### PCB LAYOUT



### CIRCUIT



### HOW TO ORDER

14 5638 109 211 862

250 pieces per Tape and Reel



# S.O. DIMM Connectors



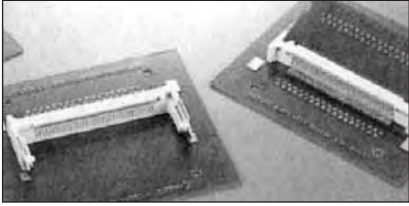
## Features/Benefits

### SERIES 6401

Series 6401 is a right-angle SMT connector, conforming to JEDEC MO-160 standard of S.O. DIMM.

### TECHNICAL SPECIFICATIONS

<b>Application:</b>	RA SMT Plastic Latch	<b>DW Voltage:</b>	500V rms/min.
<b>Pitch:</b>	1.27mm (0.050)	<b>Contact Material:</b>	Phosphor Bronze
<b>Number of Contacts:</b>	72	<b>Insulator Material:</b>	LCP
<b>Height:</b>	5.5mm (0.217)	<b>Operating Temperature:</b>	-55°C~85°C
<b>Current Rating:</b>	0.5A Max.		95% Max.
<b>Voltage Rating:</b>	125V Max.	<b>Standard:</b>	JEDEC MO-160
<b>Mating Cycles</b>	25		

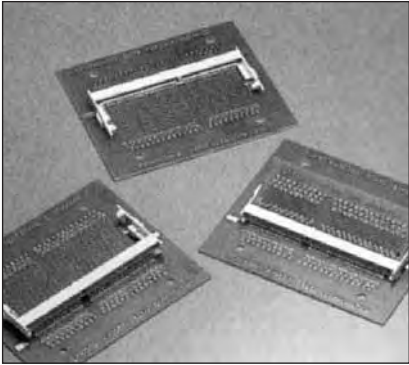


### SERIES 6402

Series 6402 is a right-angle SMT connector, conforming to JEDEC standard of 8-byte S.O. DIMM. It is a low cost type connector with plastic latch and has a wide variety of profile height (4.0/5.2/5.6mm). Memory modules are firmly inserted and locked by two simple latches.

### TECHNICAL SPECIFICATIONS

<b>Application:</b>	RA SMT Plastic Latch	<b>Voltage Rating:</b>	25V Max.
<b>Pitch:</b>	0.8mm (0.031)	<b>DW Voltage:</b>	1000V rms/min.
<b>Number of Contacts:</b>	144	<b>Contact Material:</b>	Phosphor Bronze
<b>Height:</b>	4.0mm (0.157)	<b>Insulator Material:</b>	LCP
	5.2mm (0.205)	<b>Operating Temperature:</b>	-55°C~85°C
	5.6mm (0.220)		95% Max.
<b>Current Rating:</b>	0.3A Max.	<b>Standard:</b>	JEDEC MO-190
<b>Mating Cycles</b>	25		



### SERIES 6403

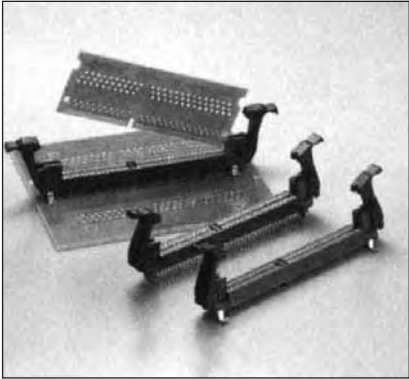
Series 6403 is a 144 positions straight SMT connector conforming to JEDEC standard of 8-byte S.O. DIMM and by both SMT and DIP type (Through Hole type).

(1) SMT and DIP are 3.3V and 5.0V type, respectively. They are also available with and without boss.

(2) SMT type, whose attachment locations of metals on the left and right side are asymmetrically arranged, is equipped with strain reliefs to improve the peeling strength to the board.

### TECHNICAL SPECIFICATIONS

<b>Application:</b>	ST SMT/DIP	<b>Contact Material:</b>	Phosphor Bronze
<b>Pitch:</b>	0.8mm (0.031)	<b>Insulator Material:</b>	LCP
<b>Number of Contacts:</b>	144	<b>Operating Temperature:</b>	-55°C~85°C
<b>Current Rating:</b>	0.3A Max.		95% Max.
<b>Voltage Rating:</b>	25V Max.	<b>Standard:</b>	JEDEC MO-190
<b>DW Voltage:</b>	1000V rms/min.		
<b>Mating Cycles</b>	25		

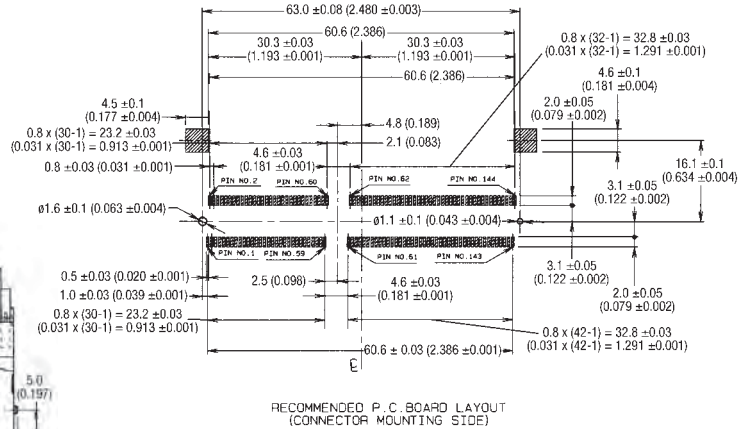
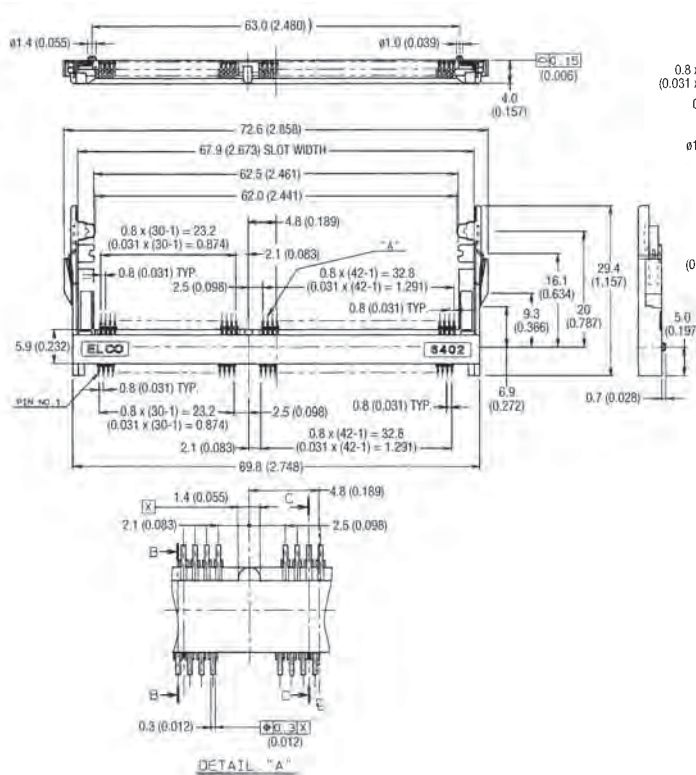


# S.O. DIMM Connectors



## Series 6402 144P Right Angle SMT with Plastic Latch

**H=4.0MM**

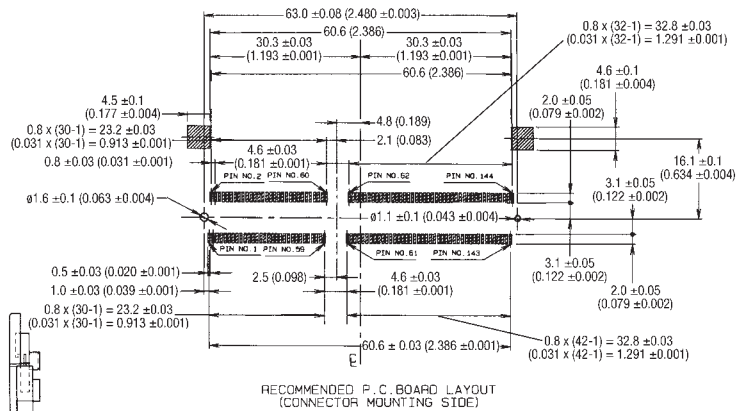
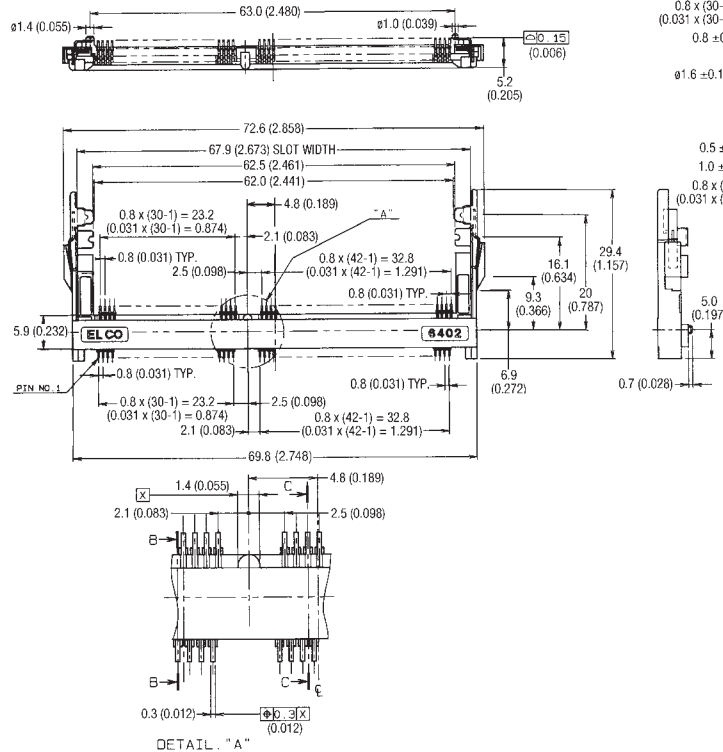


### HOW TO ORDER

**29 6402 144 000 856**

QUANTITY: 20/TRAY  
200/BOX

**H=5.2MM**



### HOW TO ORDER

**29 6402 144 001 856**

QUANTITY: 20/TRAY  
200/BOX

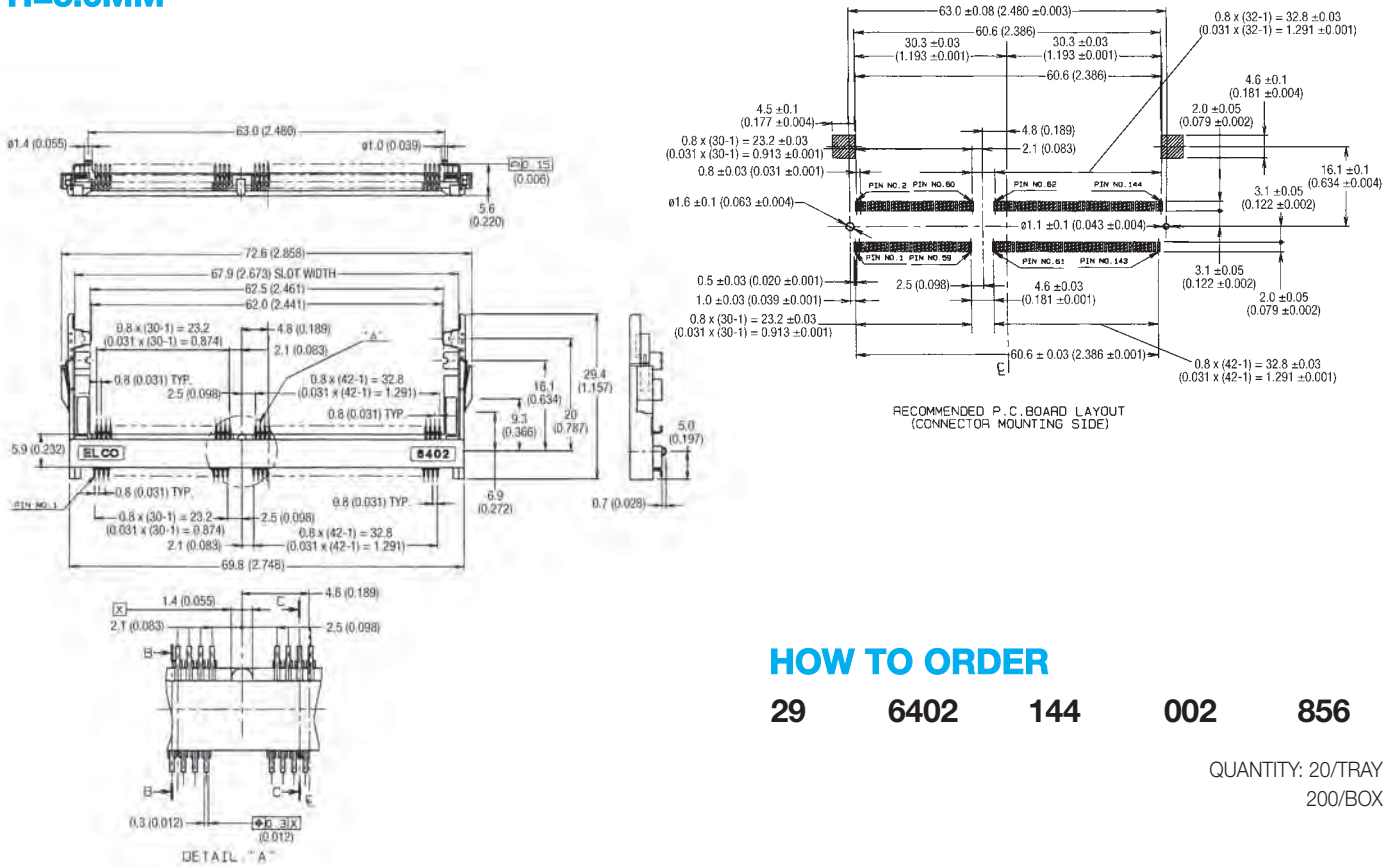


# S.O. DIMM Connectors

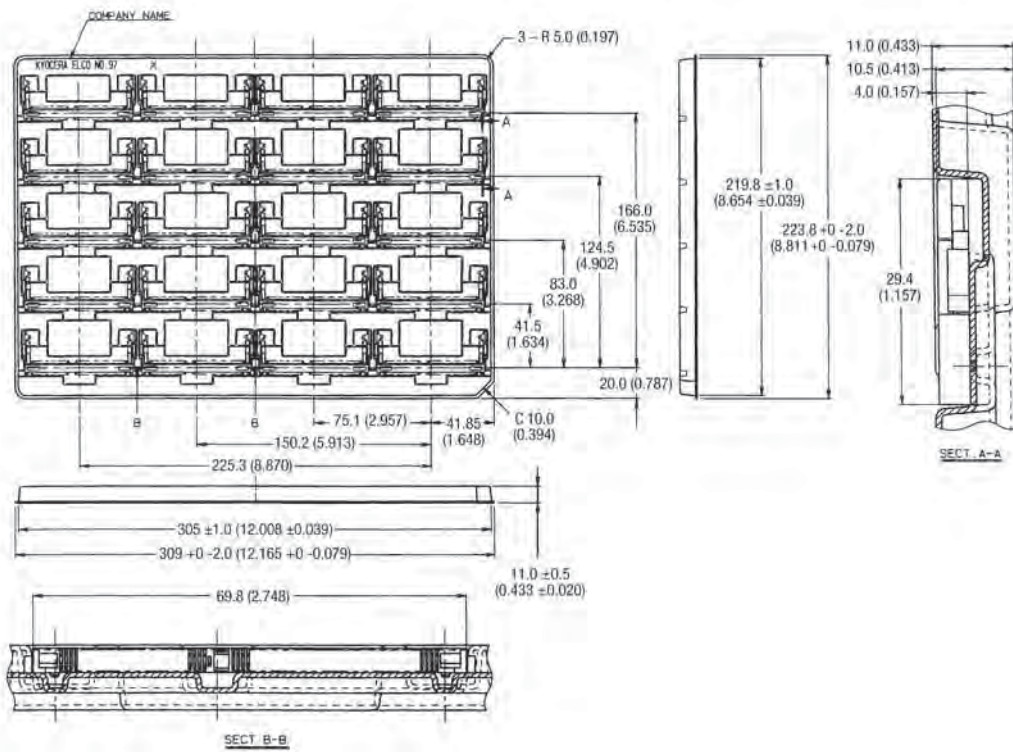


## Series 6402 144P Right Angle SMT with Plastic Latch

H=5.6MM



### TRAY/PACKAGE



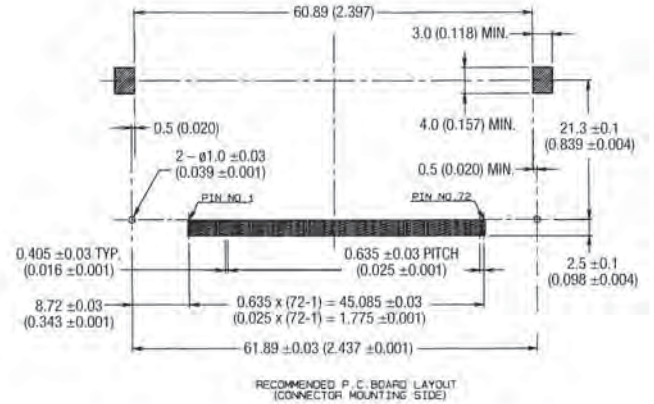
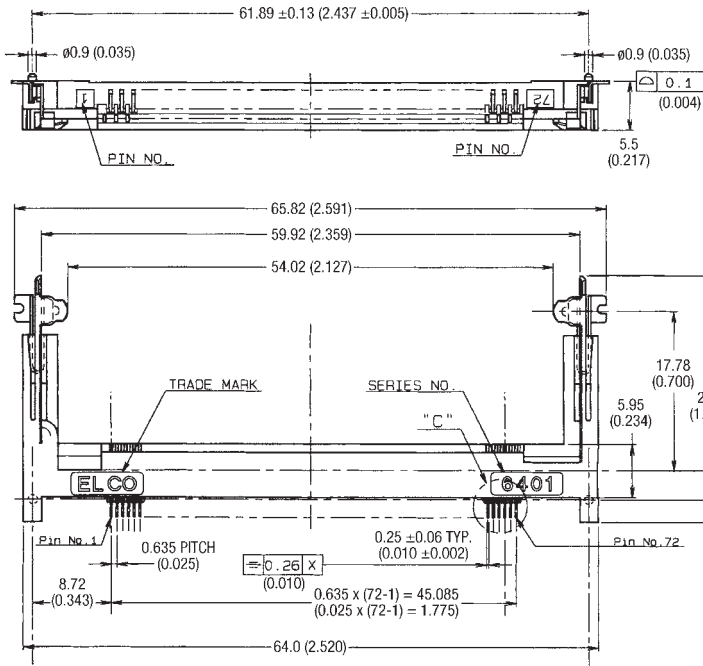


# S.O. DIMM Connectors

## Series 6401 72P Right Angle SMT



**H=5.5MM**

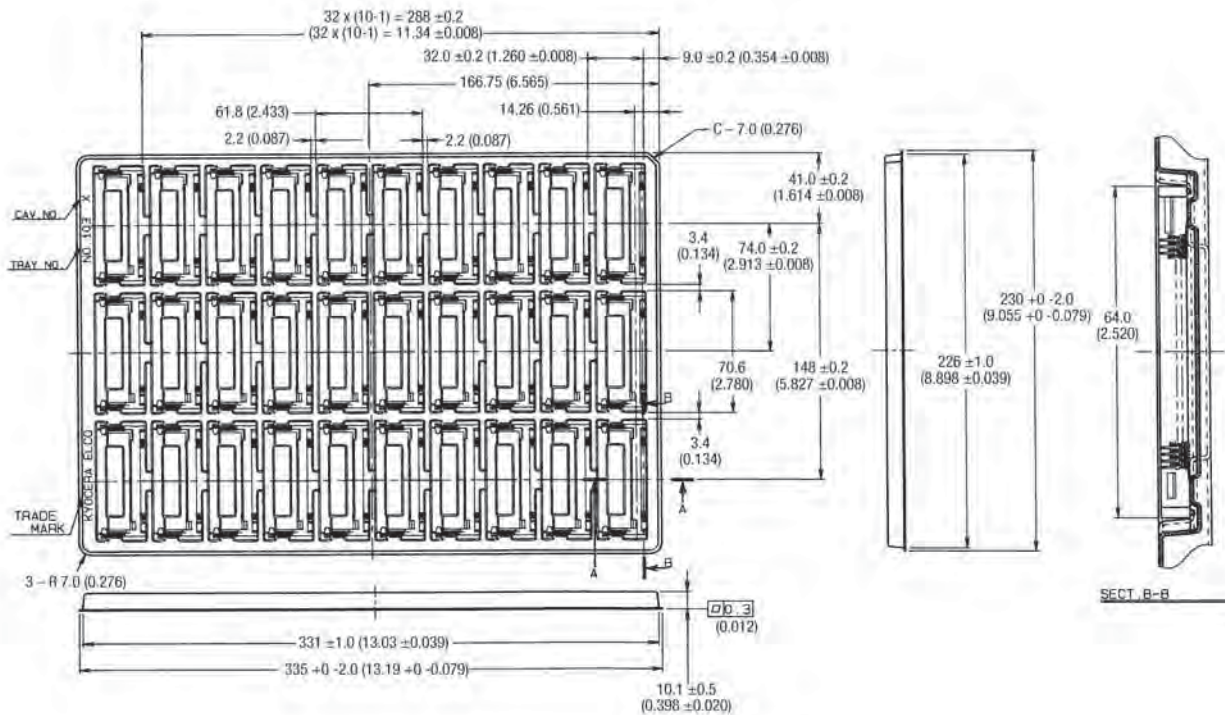


### HOW TO ORDER

**29 6401 072 001 856**

QUANTITY: 30/TRAY  
360/BOX

### TRAY/PACKAGE

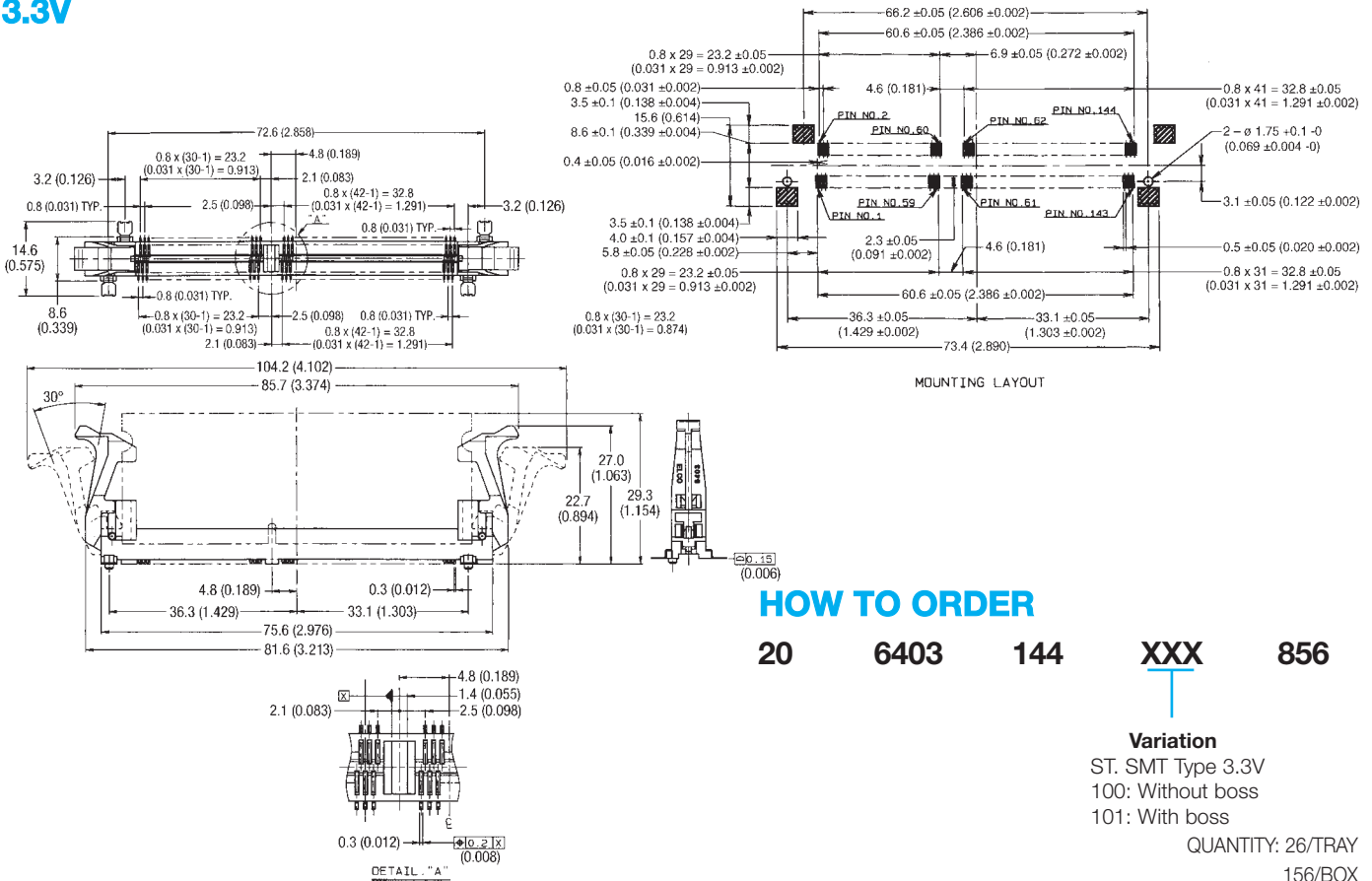


# S.O. DIMM Connectors

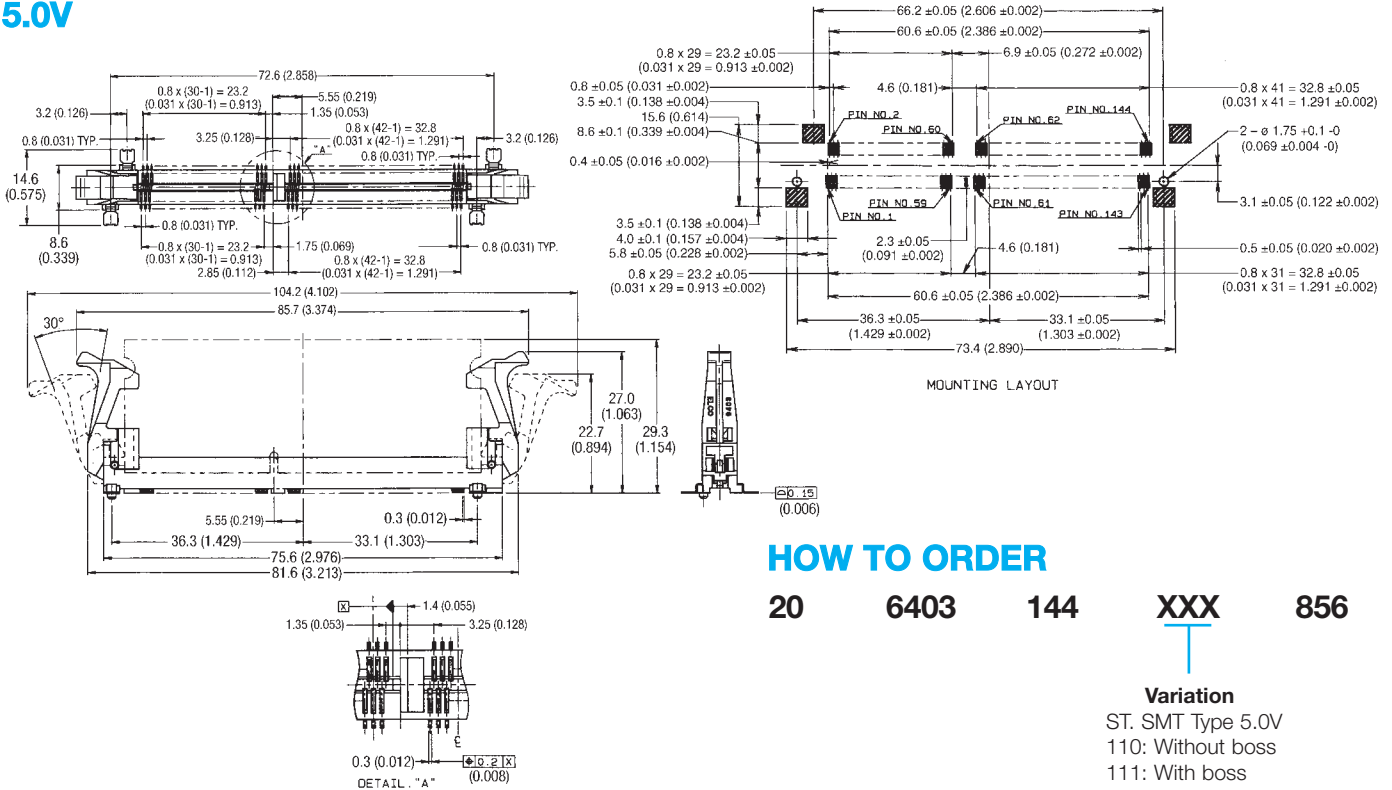
## Series 6403 144P Straight SMT Type



### 3.3V



### 5.0V

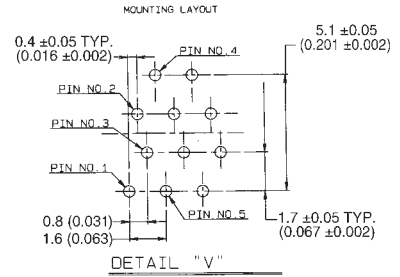
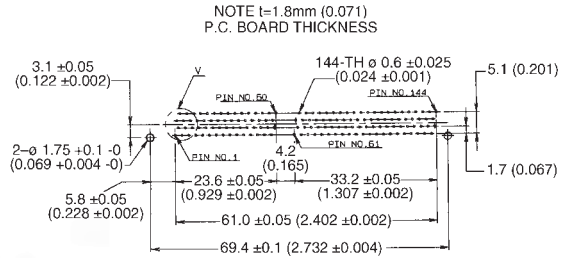
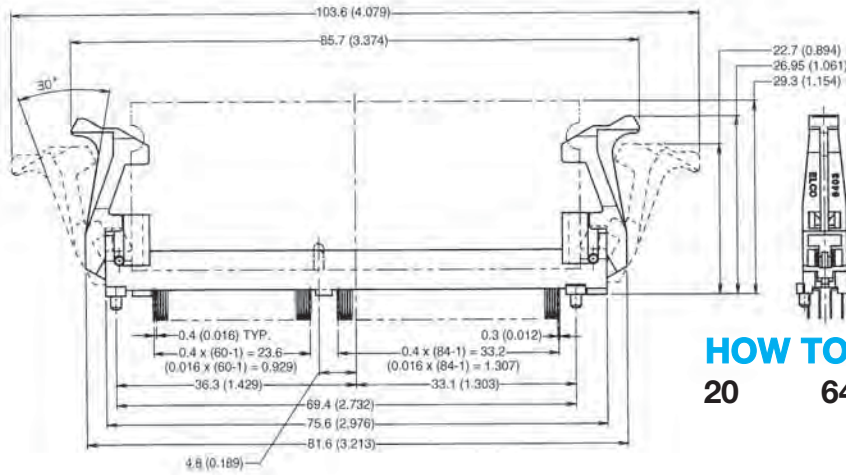
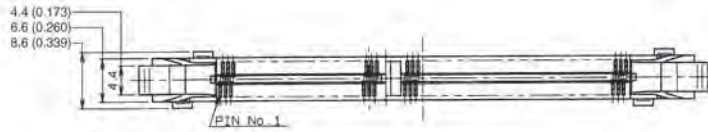


# S.O. DIMM Connectors



## Series 6403 144P Straight Through Hole Type

### 3.3V



### HOW TO ORDER

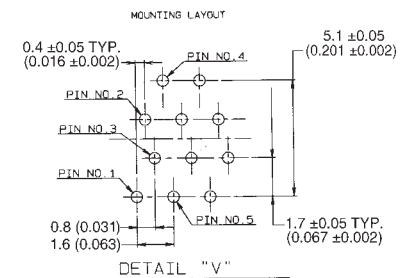
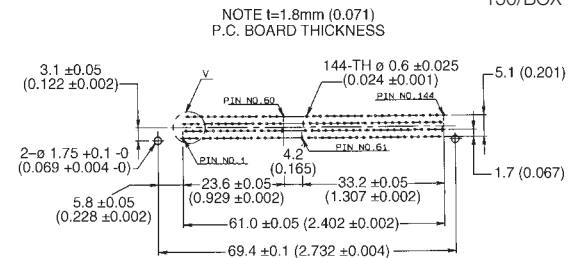
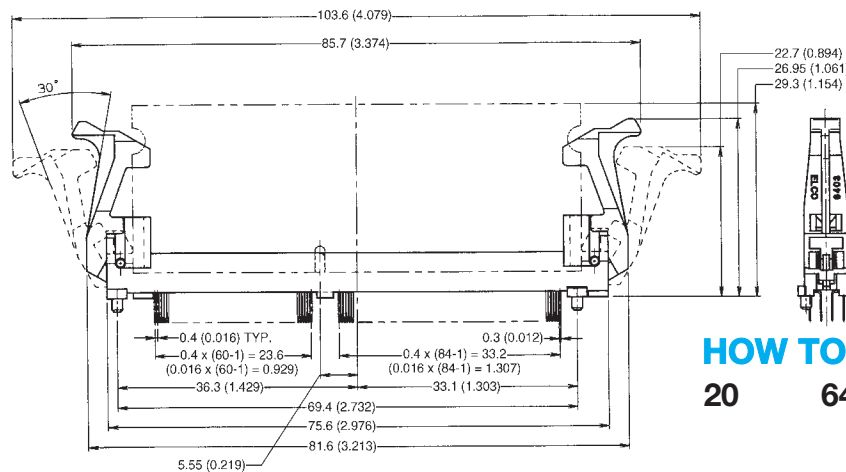
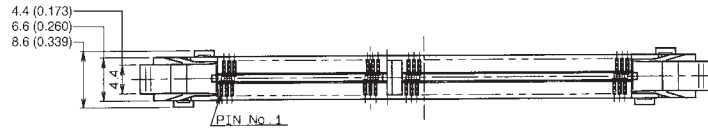
20 6403 144 XXX 856

#### Variation

ST. Through Hole Type  
000: Without boss  
001: With boss

QUANTITY: 15/TRAY  
150/BOX

### 5.0V



### HOW TO ORDER

20 6403 144 XXX 856

#### Variation

ST. Through Hole Type  
010: Without boss  
011: With boss

QUANTITY: 15/TRAY  
150/BOX



## Notice

The memory board shall be inserted and separated correctly, according to direction and process as shown below.

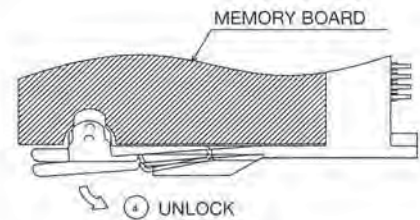
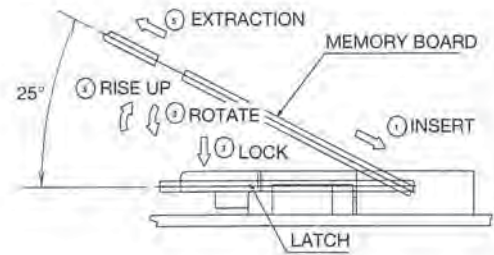
### RIGHT ANGLE TYPE (6401/6402)

#### Method of Insertion

1. The memory board shall be inserted completely.
2. It shall be rotated.
3. It shall be pushed into the latch on both sides from upward.

#### Method of Separation

4. The latch on both sides shall be unlocked.
5. After the memory board rises, it shall be extracted.



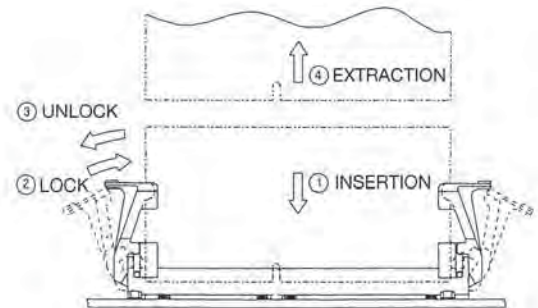
### STRAIGHT TYPE (6403)

#### Method of Insertion

1. The lever on both sides shall be unlocked and memory board shall be inserted.
2. The memory board shall be inserted even the latch on both sides shall be locked.

#### Method of Separation

3. The lever on both sides shall be unlocked.
4. The memory board shall be extracted.





## PASSIVES

### Capacitors

Multilayer Ceramic  
Film  
Glass  
Niobium Oxide\* - OxiCap™  
Pulse Supercapacitors  
Tantalum

### Circuit Protection

Thermistors  
Fuses - Thin Film  
Transient Voltage Suppressors  
Varistors - Zinc Oxide

### Directional Couplers

Thin-Film

### Filters

Ceramic  
EMI  
Noise  
SAW  
Low Pass - Thin Film

### Inductors

Thin-Film

### Integrated Passive Components

PMC - Thin-Film Networks  
Capacitor Arrays  
Feedthru Arrays  
Low Inductance Decoupling Arrays

### Piezo Acoustic Generators

Ceramic

### Resistors

Arrays  
Miniature Axials

### Timing Devices

Clock Oscillators  
MHz Quartz Crystal  
Resonators  
VCO  
TCXO

## CONNECTORS

Automotive  
Standard, Custom

Board to Board  
SMD (0.4, 0.5, 1.0mm), BGA, Thru-Hole

Card Edge

DIN41612  
Standard, Inverse, High Temperature

FFC/FPC  
0.3, 0.5, 1.0mm

Hand Held, Cellular  
Battery, I/O, SIMcard, RF shield clips

2mm Hard Metric  
Standard, Reduced Cross-Talk

IDC Wire to Board  
Headers, Plugs, Assemblies

Memory  
PCMCIA, Compact Flash, Secure Digital, MMC,  
Smartcard, SODIMM

Military  
H Government, DIN41612

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