

# ETO 4, 6 series rectangular electrical connector

## Product Introduction

- Comply with MIL-C-55302/23, MIL-C-55302/24, MIL-C-55302/25 standard, equivalent to GJB1438A standard
- Withstanding wave-soldering
- 1.905mm insert gap
- 86, 110, 204, 250, 276 cores in 4 rows
- 204, 252, 300, 360, 402, 448 cores in 6 rows

## Main technical performance

- Operating temperature:  $-55^{\circ}\text{C}\sim+125^{\circ}\text{C}$
- Current rating: 3A
- Contact resistance:  $\leq 0.025\Omega$
- Dielectric withstanding voltage: Standard atmospheric pressure 750V; low pressure: 250V
- Insulation resistance: normal temperature  $\geq 5000\text{M}\Omega$ , damp heat  $\geq 20\text{M}\Omega$
- Endurance: 1000 cycles
- Vibration: frequency 10~2000Hz, acceleration  $147\text{m/s}^2$
- Salt spray: 96h
- Shock: Acceleration  $980\text{m/s}^2$

## Ordering information

<b>Basic series</b>	<b>ETO</b>	<b>6</b>	<b>7</b>	<b>2-</b>	<b>360-</b>	<b>31</b>	<b>1-</b>	<b>9500</b>
Row number of contact	4 rows		6 rows					
Structure type	See table 1							
Insulator material	2-PPS (polyphenylene sulfide )							
Contact No.	Use three digit to represent, see the chart 2							
Termination	See table 3							
Contact plating	Plug: 1- gold plating; 2- tinplating    Receptacle: 1- gold plating; 2-tinplating							
Type of installing fastener	See ETO series installation and recognizable fastener type							

Table 1

Plug		Mark no.	Receptacle		Mark no.	
ETO4	Straight PCB	1	ETO4	Straight PCB	2	
	Elbow PCB	5		Elbow PCB	6	
ETO6	Straight PCB	cores > 402	ETO6	Straight PCB	core > 402	2
		cores ≤ 402			cores ≤ 402	4
	Elbow PCB	cores > 402		Elbow PCB	core > 402	6
		cores ≤ 402			cores ≤ 402	8

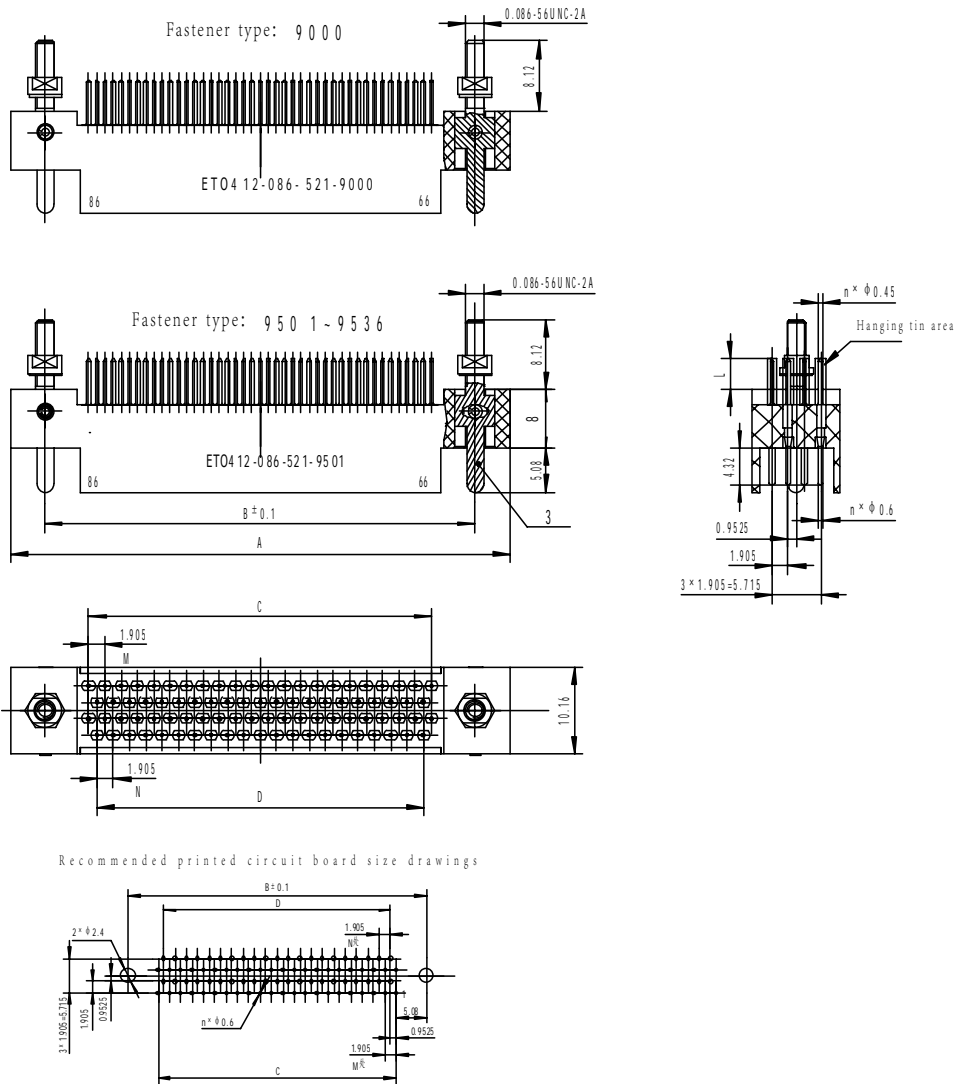
Table 2

4 rows	086, 110, 204, 250, 276
6 rows	204, 252, 300, 360, 402, 448

Table 3

Used for plug	Mark No.	Used for receptacle	Mark No.
Pin, straight dip soldering, 2.77× Φ0.45	51	Socket, straight dip soldering, 2.77× Φ0.45	81
Pin, straight dip soldering, 3.56× Φ0.45	52	Socket, straight dip soldering, 3.56× Φ0.45	82
Pin, straight dip soldering, 4.37× Φ0.45	53	Socket, straight dip soldering, 4.37× Φ0.45	83
Pin, straight dip soldering, 6.35× Φ0.45	54	Socket, straight dip soldering, 6.35× Φ0.45	75
Pin, elbow dip soldering, 2.77× Φ0.5	31	Socket, elbow dip soldering, 2.77× Φ0.5	84
Pin, elbow dip soldering, 3.56× Φ0.5	32	Socket, elbow dip soldering, 3.56× Φ0.5	85
Pin, elbow dip soldering, 4.37× Φ0.5	33	Socket, elbow dip soldering, 4.37× Φ0.5	86
Pin, elbow dip soldering, 6.35× Φ0.5	34		

**ETO4 series  
Straight plug**

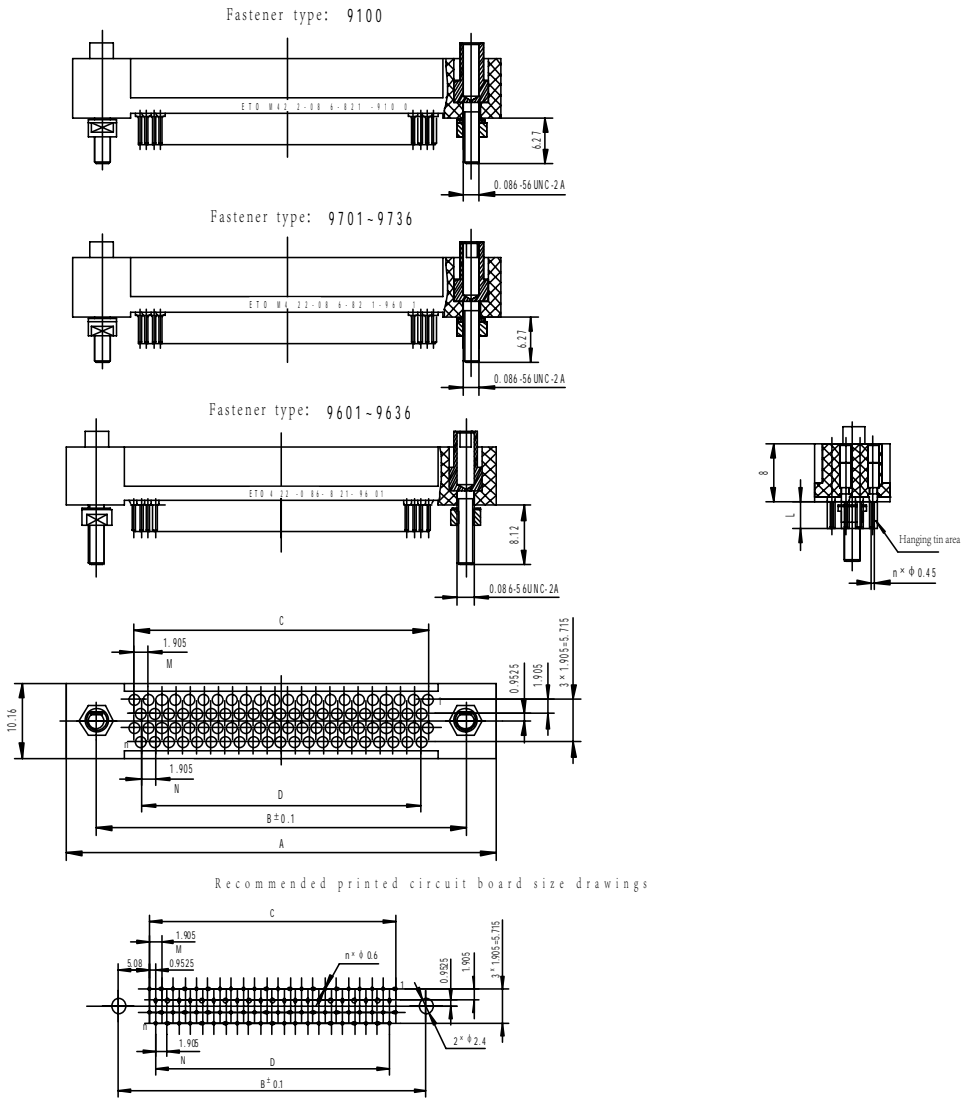


Recommended printed circuit board size drawings

Type of plug	Size						
	A	B	C	D	M	N	n
ETO412-086-XX1-XXXX	58.29	50.16	40.005	38.1	21	20	86
ETO412-110-XX1-XXXX	69.72	61.6	51.435	49.53	27	26	110
ETO412-250-XX1-XXXX	136.4	128.27	118.11	116.205	62	61	250

Type of contact	Size	Note
	L	
51	2.77	PCB dip soldering
52	3.56	
53	4.37	
54	6.35	

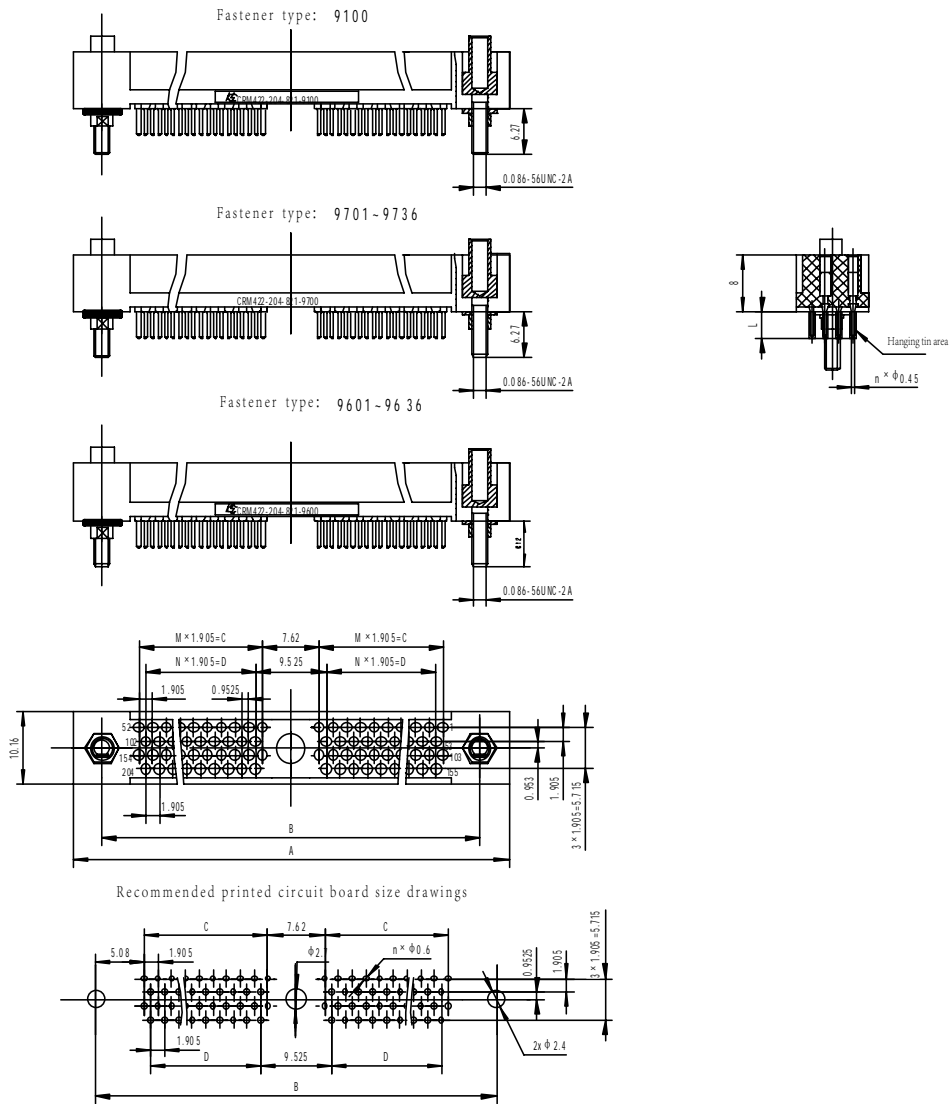
**ETO4 series**  
**Straight receptacle**



Type of receptacle	Size						
	A	B	C	D	M	N	n
ETO422-086-XX1-XXXX	58.29	50.16	40.005	38.1	21	20	86
ETO422-110-XX1-XXXX	69.72	61.6	51.435	49.53	27	26	110
ETO422-250-XX1-XXXX	136.4	128.27	118.11	116.205	62	61	250

Contact type	Size	Note
	L	
75	6.35	PCB dip soldering
81	2.77	
82	3.56	
83	4.37	

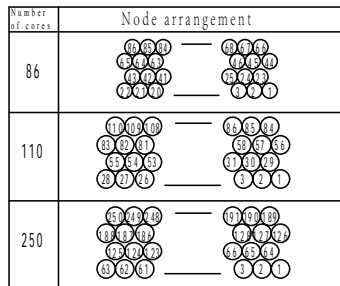
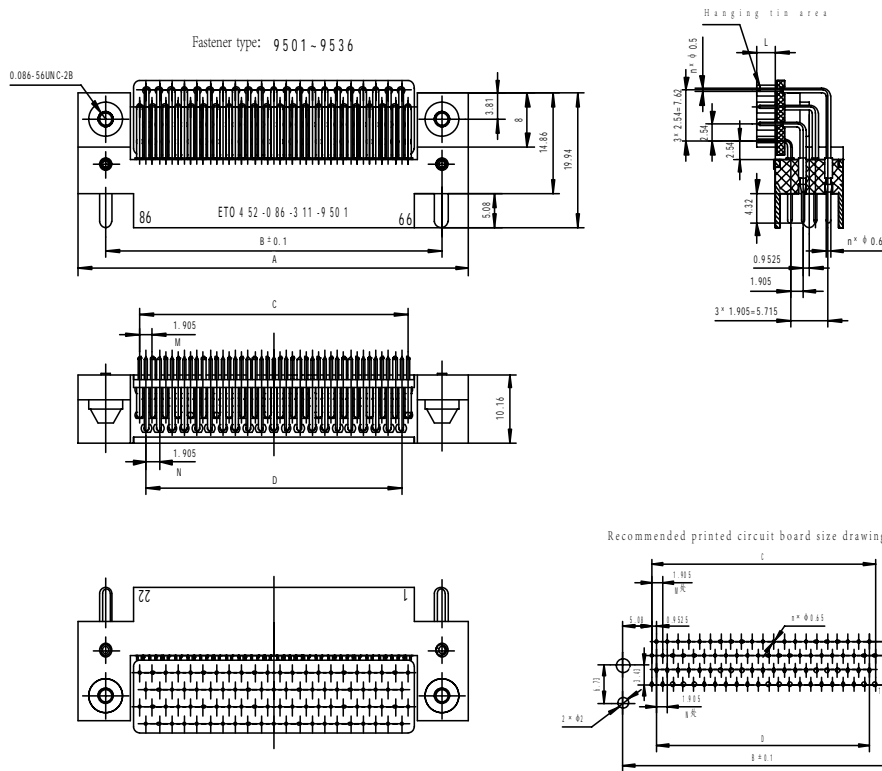
**ETO4 series**  
**Straight receptacle**



Receptacle type	Size						
	A	B	C	D	M	N	n
ETO422-204-XX1-XXXX	121.16	113.03	47.625	45.72	25	24	204
ETO422-276-XX1-XXXX	155.4	147.32	64.77	62.865	33	34	276

Contact type	Size	Note
	L	
75	6.35	
81	2.77	
82	3.56	
83	4.37	

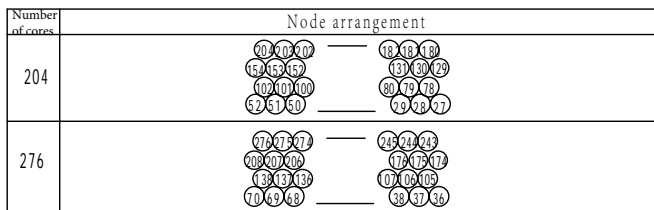
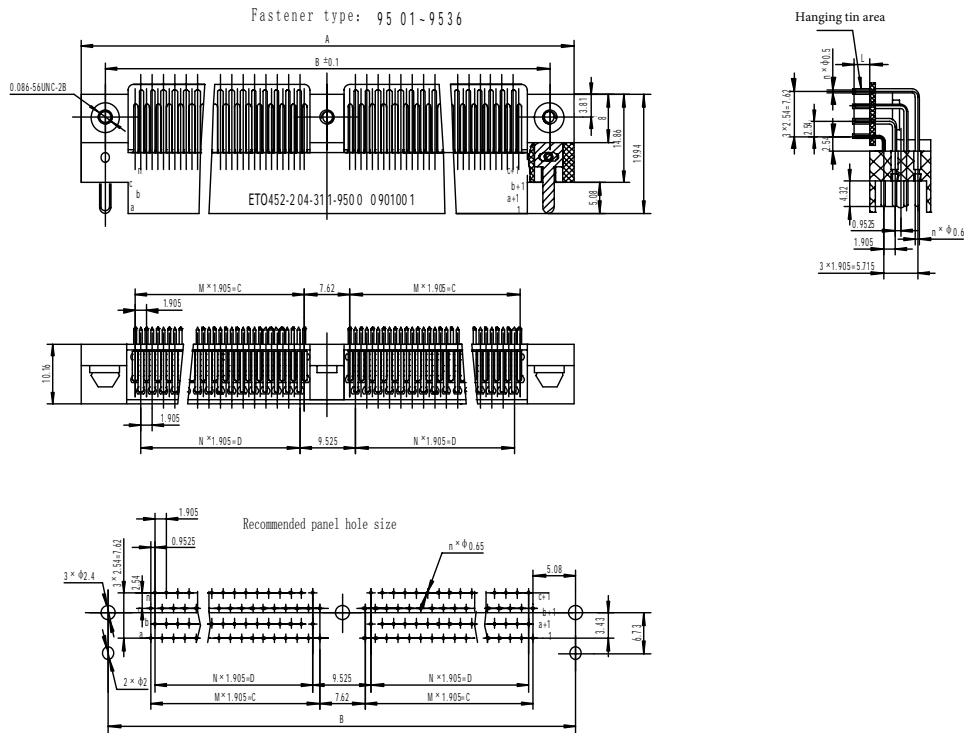
**ETO4 series  
Elbow plug**



Plug type	Size						
	A	B	C	D	M	N	n
ETO452-086-XX1-XXXX	58.29	50.16	40.005	38.1	21	20	86
ETO452-110-XX1-XXXX	69.72	61.6	51.435	49.53	27	26	110
ETO452-250-XX1-XXXX	136.4	128.27	118.11	116.205	62	61	250

Contact type	Size	Note
	L	
31	2.77	PCB dip soldering
32	3.56	
33	4.37	

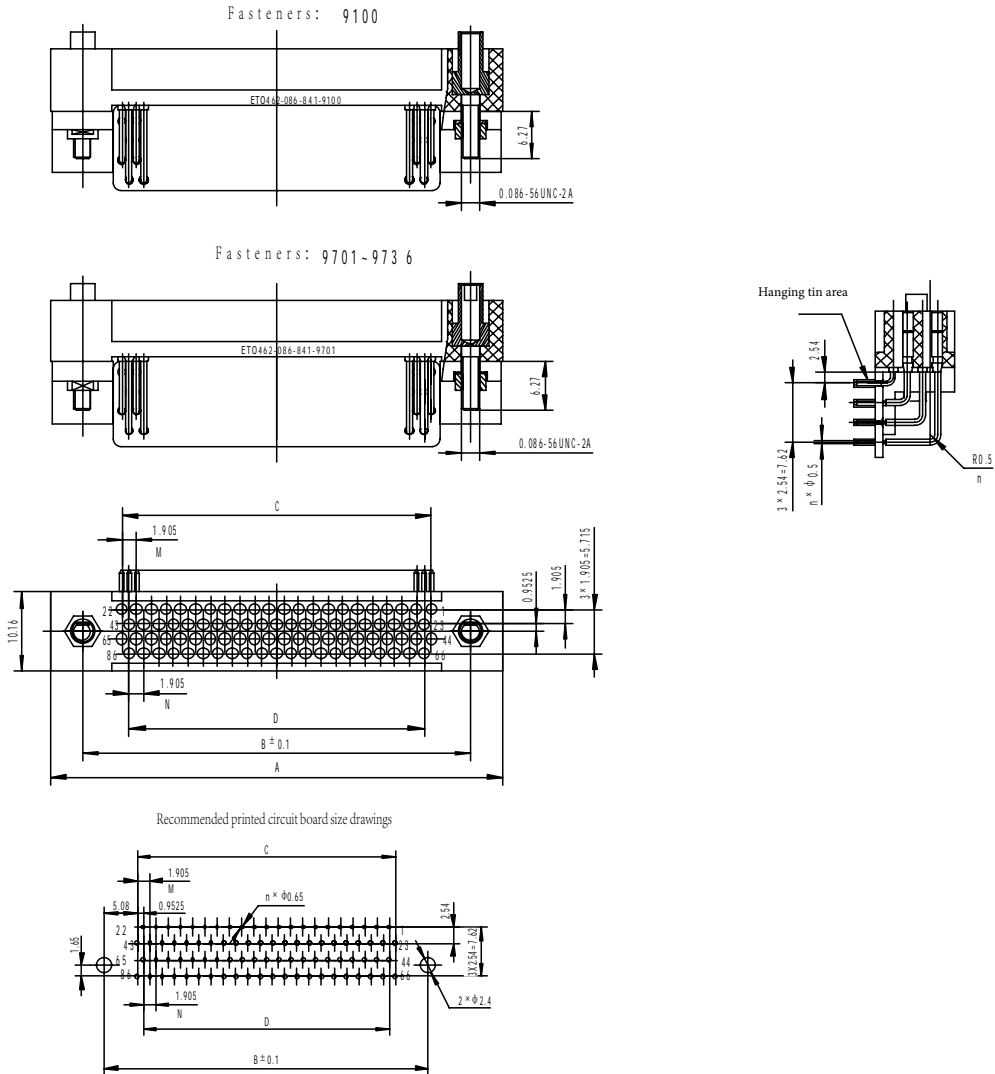
ETO4 series  
Elbow plug



Plug type	Size									
	A	B	C	D	M	N	a	b	c	n
ETO452-204-XX1-XXXX	121.16	113.03	47.625	45.72	25	24	52	102	154	204
ETO452-276-XX1-XXXX	155.4	147.3	64.77	62.865	34	33	70	138	208	276

Contact type	Size	Note
	L	
31	2.77	PCB dip soldering
32	3.56	
33	4.37	
34	6.35	

**ETO4 series**  
**Elbow receptacle**

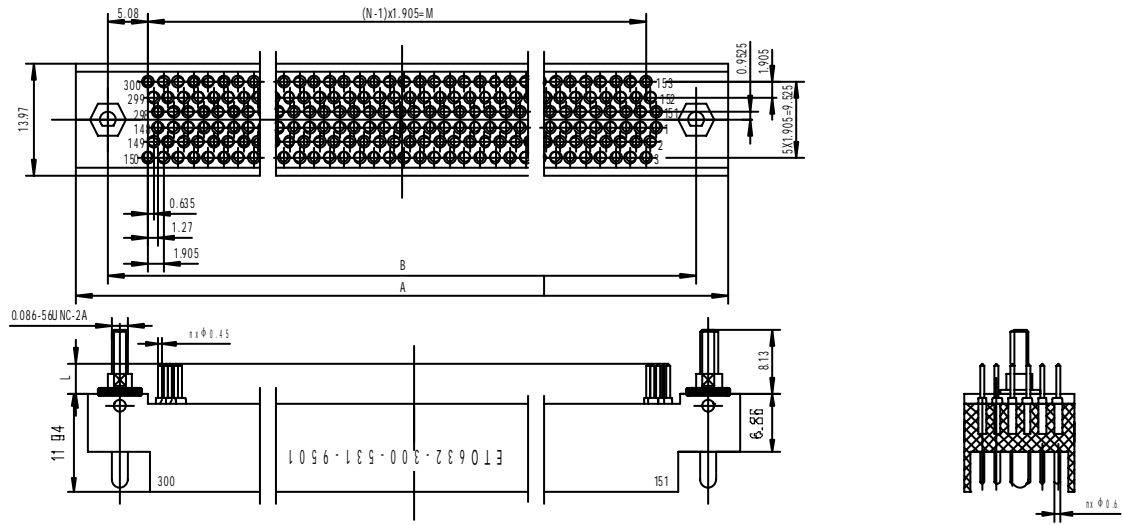


Receptacle type	Size						
	A	B	C	D	M	N	n
ETO462-086-XX1-XXXX	58.29	50.16	40.005	38.1	21	20	86
ETO462-110-XX1-XXXX	69.72	61.6	51.435	49.53	27	26	110
ETO462-250-XX1-XXXX	136.4	128.27	118.11	116.205	62	61	250

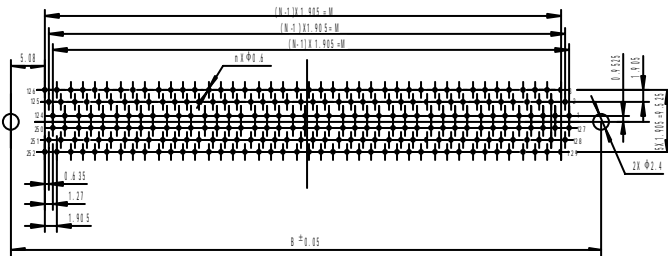
Contact type	Size	Note
	L	
84	2.77	PCB dip soldering
85	3.56	
86	4.37	



**ETO6 series**  
**Straight plug**



Recommended printed circuit board size drawings



Receptacle type	Size				
	A	B	M	N	n
ETO632-204-XX1-XXXX	82.4	74.295	62.865	34	204
ETO632-252-XX1-XXXX	97.7	89.535	78.105	42	252
ETO632-300-XX1-XXXX	112.9	104.775	93.345	50	300
ETO632-360-XX1-XXXX	132	123.825	112.395	60	360
ETO632-402-XX1-XXXX	145.3	137.16	125.83	67	402

Contact type	Size	Note
	L	
51	2.77	
52	3.56	
53	4.37	
54	6.35	













Fasteners Code	plug	socket	Fasteners Code	plug	socket
01			19		
02			20		
03			21		
04			22		
05			23		
06			24		
07			25		
08			26		
09			27		
10			28		
11			29		
12			30		
13			31		
14			32		
15			33		
16			34		
17			35		
18			36		

c apgnrgml 1# mlr arnm grgml

	BDU BD		9500 9501-9536
			9500 9501-9536
	(WFO)		9000
	EFOG WFFFW		9600 9601-9636 9700 9701-9736
	# VUCH		9100