



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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cannon

MKJ5 Series Connectors
Miniature Circular Catalog



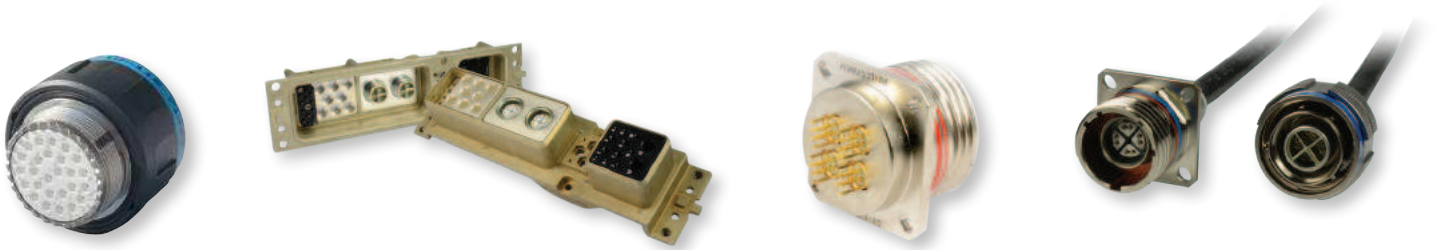
ITT

ENGINEERED FOR LIFE

Amazing things happen when great things connect

ITT's Interconnect Solutions' Cannon brand is a leading global manufacturer of connector products serving international customers in the aerospace and defense, medical, energy, transportation and industrial end markets. Whether delivering critical specs to aircraft pilots, streaming data through communications satellites or enabling ultrasound technology that gives an expectant mother the first glimpse of her unborn child, Cannon connects the world's most important information with the people who need it.

No one is more qualified to help meet mission-critical requirements and equip military personnel than ITT Cannon. With 100 years of interconnect excellence and seven decades of global presence in the Defense Industry, we are a committed partner among today's military equipment manufacturers. We continue to lead the market in interconnect solutions that support combat preparation and to meet the military's needs for adaptability, mobility and survivability. And we do so with one goal in mind: to get our soldiers back home safely.



A Century of Connections

In 2015, Cannon marked its 100th Anniversary of Innovation. Cannon products were used in the first "talking" movies and helped transmit the first messages back to earth when we landed on the moon. Today we proudly continue our legacy of innovating to connect the world and inspire the successes of the next century – because amazing things happen when great things connect.

Visit ittcannon.com to learn more.

About ITT

ITT is a diversified leading manufacturer of highly engineered critical components and customized technology solutions for the energy, transportation and industrial markets. Building on its heritage of innovation, ITT partners with its customers to deliver enduring solutions to the key industries that underpin our modern way of life. This work is made possible by the talent and innovation of committed ITT employees in more than 35 countries who create trusted products and brands such as Goulds Pumps, KONI shock absorbers, Cannon connectors and Enidine energy absorption devices. Founded in 1920, ITT is headquartered in White Plains, N.Y. and generated 2015 revenues of \$2.5 billion. For more information, visit itt.com

Our connector portfolio remains one of the most extensive in the industry, providing customers with a reliable and cost-effective range of interconnect solutions.

Visit ittcannon.com to learn more.



Medical Equipment



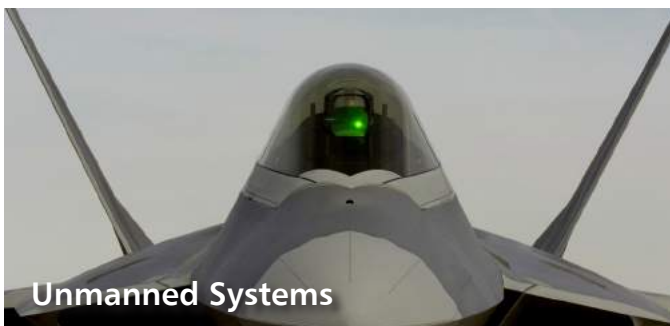
Marine Vessels



Rail



Soldier-Worn Systems



Unmanned Systems



Heavy Equipment



Commercial Aircraft



Oil & Gas

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MKJ Series Connectors

71% weight and 52% size reduction in an industry-leading quick disconnect*

ITT Cannon continues its tradition of innovation with the MKJ line of miniature circular connectors. Bringing together a unique combination of design, functionality and flexibility, Cannon's MKJ Series offers proven, reliable and cost-effective interconnect solutions that enable critical communication, navigation and high speed data transmission—at half the size and weight of traditional ones. Choose from UNC thread, double start, triple start, bayonet and breakaway coupling methods in a cost-efficient, lightweight and highly engineered design.



MKJ0
UNC Thread



MKJ1
Double Start



MKJ3
Bayonet



MKJ4
Breakaway



MKJ5
Triple Start



Key Features

- 71% weight and 52% size reduction without the loss of reliability*
- Available in rear-release crimp, PC tail or solder cup contacts
- Shells and jam nuts available in aluminum alloy or corrosion resistant stainless steel
- Up to 2,000 mating cycles
- Environmentally sealed using fluorosilicone material for the front interfacial seal and rear wire sealing grommet
- RoHS Compliant

*When compared to the 38999 layouts with size 22 contacts

A Wide Range of Coupling Styles

The wide range of coupling options available for the MKJ Series allows compatible connectors to meet your demands even in the harshest environments.



Coupling	MKJ0 UNC Thread	MKJ 1 Double Start	MKJ 3 Bayonet	MKJ 4 Breakaway	MKJ 5 Triple Start
Markets & Segments	Defense, Aerospace, Medical, Industrial, Commercial				
Hardware	Aluminum/ Stainless Steel	Aluminum/ Stainless Steel	Aluminum/ Stainless Steel	Aluminum/ Stainless Steel	Aluminum/ Stainless Steel
EMI Shielding Effectiveness	40dB Attenuation, 100MHz to 1000MHz				
Mating Cycles	2000	2000	250 Aluminum 2000 Stainless Steel	2000	500
RoHS Compliant	Available				
Materials	Shells - Aluminum Alloy or Stainless Steel Insulators - Thermoplastic Seals - Fluorosilicone Contacts - Copper Alloy with gold over nickel plating				

Product Performance

MKJ Series Performance				
Contact Size	#23	#20HD	#16	#12
Spacing	.076"	.106"	.170"	.230"
Contact Type	Rear Crimp, Solder Cup, PCB Mount			
Current Rating	5 Amps	7.5 Amps	13 Amps	23 Amps
Wire Accommodation	#22 - #28 AWG	#20 - #24 AWG	#16 - #20 AWG	#12 - #14 AWG
DWV Voltage (VAC)	750 VAC	1000 VAC	1800 VAC	1800 VAC
Insulation Resistance	5000 Megaohms RMS Sea			
Operating Temperature	-65°C to +175°C			
Contact Resistance	8 Milliohms Maximum			
Shock/Vibration	300g / 37g			
Clocking Position	Master Key and 2 Secondary Keys. 6 Clocking Positions			
Housing Materials	Aluminum and Stainless Steel			
Receptacle Mounting	Jam Nut, Square Flange, In-Line			

Markets & Applications

Cannon MKJ Miniature Circular Connectors are designed for soldier-worn systems, military equipment, industrial and medical applications...and so much more.



Key Applications

- Sensors
- Satellites
- Instrumentation
- Missile systems
- Avionic systems
- Soldier technology
- UAVs / unmanned systems
- Navigation & telemetry equipment
- Medical test & diagnostic equipment
- Ruggedized computers
- Hand-held communication equipment
- Commercial & military aircraft electronics
- Industrial equipment

Highlights

- Versatile and proven for use in **military, industrial and medical applications** where safety and reliability are critical
- A number connectors in the MKJ Series offer a **2,000 mating cycle**, making them the perfect solution for ruggedized computers and hand-held communications equipment
- **Multiple coupling mechanisms** enable connectivity for navigation and telemetry applications
- Plugs and receptacles are **environmentally sealed** for use in the harshest environments
- **Teflon nickel, black zinc nickel and olive drab cadmium** plating maintain robust reliability for 500 hours of salt spray
- **RoHS Compliant** plating and part numbers available

We Connect the Aerospace & Defense Industry with Mission Critical Data & Signal Transmission

At half the size and weight of traditional harsh environment connectors, Cannon's MKJ5 Triple Start miniature circular interconnect offers superior vibration resistance and EMI prevention, without the loss of reliability or performance. MKJ5 Triple Start meets mission critical requirements for extended cycles in robust shock and vibration environments and is fully intermateable with other miniature equivalents. As part of Cannon's proven and versatile MKJ product line, MKJ5 Triple Start shares many of the attributes that make it one of the most lightweight and reliable sets of miniature circular connectors on the market.

Why ITT Cannon

With more than 100 years of interconnect excellence and seven decades of global presence in the defense industry, no one is more qualified to support mission critical electronic, communication and control applications than ITT Cannon. We are a committed partner among today's military equipment manufacturers and continue to lead the market in connector reliability and performance, even in the harshest environments.



Product Overview

MKJ5 Triple Start

Part of the MKJ family of miniature circular connectors, ITT Cannon's innovative MKJ5 features threaded coupling with high density size 23 machined contacts for crimp and PCB. Its unique triple-start threaded coupling mechanism allows MKJ5 to quickly connect and disconnect, up to 500 cycles, while maintaining performance under sustained shock and vibration conditions. The MKJ5 also offers flexibility in configuration options for connectivity, multiple keying positions, and rear accessory threads or integral band platforms. It meets customer requirements for extended cycles in robust shock and vibration environments through its high-reliability internal ratchet mechanism system and is one of the most lightweight and reliable miniature circular connectors on the market.




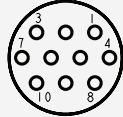
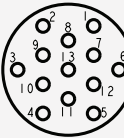
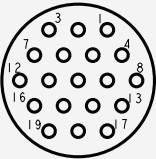
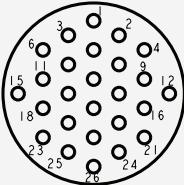
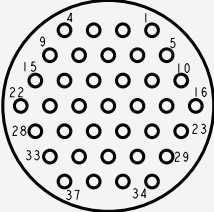
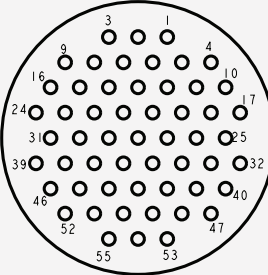
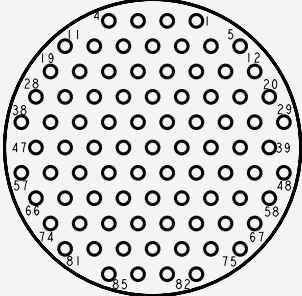



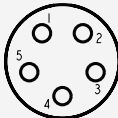
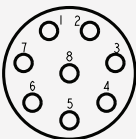
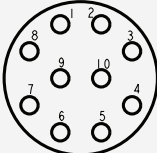
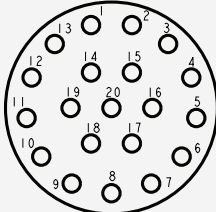
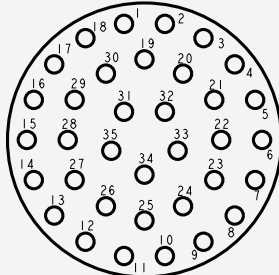
Smaller, lighter packaging and high reliability under vibration make Cannon's MKJ5 miniature circular connectors well-suited for a variety of electronic, communication and control applications for military and commercial aircraft, rotor craft, launch vehicles, unmanned vehicles, ground vehicles and heavy equipment.

Specifications			
Contact Type	Rear Crimp, Solder Cup, PCB Mount	Insulation Resistance	5,000 Megaohms RMS Sea
Contact Spacing	Size 23 (0.076" spacing), Size 20HD (0.106" spacing), Size 16 (0.170" spacing), Size 12 (0.230" spacing)	Operating Temperature	-65°C to +175°C
		Contact Resistance	8 Milliohms Maximum
		Shock/Vibration	300g / 37g
		EMI Shielding Effectiveness	40dB Attenuation, 100MHz to 1000MHz
Wire Accommodation	Size 23 #22 - #28 AWG, Size 20HD #20 - #24 AWG, Size 16 #16 - #20 AWG, Size 12 #12 - #14 AWG	Coupling	Rotating Triple Start Coupling Nut
		Receptacle Mounting	Jam Nut, Flange, In-Line
		Durability	500 Mating Cycles
Contact Rating	Size 23 5 Amps, Size 20HD 7.5 Amps, Size 16 13 Amps, Size 12 23 Amps	Layouts	See Available Layout on Pages 10-11
		Materials	Shells - Aluminum Alloy or Stainless Steel
Insulators - Thermoplastic			
Seals - Fluorosilicone			
Contacts - Copper alloy with gold over nickel plating			
DWV Voltage (VAC)	Size 23 750 VAC, Size 20HD 1000 VAC, Size 16 1800 VAC, Size 12 1800 VAC		Canted Spring - Stainless Steel

*When compared to the 38999 layouts with size 22 contacts

MKJ5 Contact Arrangements & Layouts




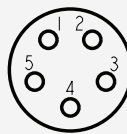
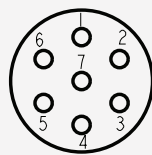
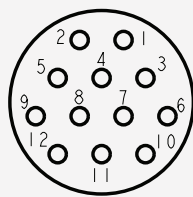
Contact Arrangements							
Layout	Contacts						
	Size 23						
8-4	4						
		8-4 Layout	8-6 Layout	8-7 Layout	9-10 Layout	10-13 Layout	11-19 Layout
8-6	6						
8-7	7						
9-10	10						
10-13	13						
11-19	19						
12-26	26						
		12-26 Layout	15-37 Layout	18-55 Layout	19-85 Layout		
15-37	37						
18-55	55						
19-85	85						

Contact Arrangements				
Layout	Contacts			
	Size 20HD			
8-23	3			
		8-23 Layout	9-25 Layout	10-28 Layout
9-25	5			
10-28	8			
11-210	10			
		11-210 Layout	15-220 Layout	18-235 Layout
15-220	20			
18-235	35			



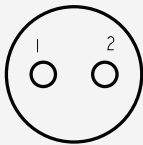
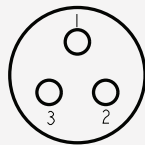
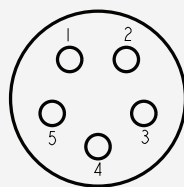
Note: Pin insert front side shown for reference only. Socket insert is a mirror image.

MKJ5 Contact Arrangements & Layouts

Contact Arrangements							
Layout	Contacts						
	Size 16						
8-1	1						
10-2	2						
11-4	4						
12-5	5						
15-7	7						
18-12	12						

					
8-1 Layout	10-2 Layout	11-4 Layout	12-5 Layout	15-7 Layout	18-12 Layout

Contact Arrangements						
Layout	Contacts					
	Size 12					
9-1	1					
12-2	2					
15-2	2					
15-3	3					
18-5	5					

				
9-1 Layout	112-2 Layout	15-2 Layout	15-3 Layout	18-5 Layout

Note: Pin insert front side shown for reference only. Socket insert is a mirror image.

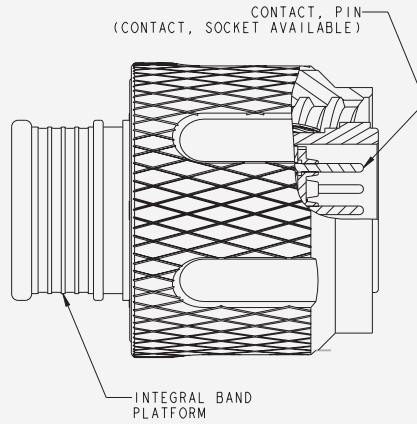
MKJ5 Plug

Banded & Accessory Thread

MKJ5 Plug (Shown with Banding/Overmolding Attachment)



MKJ5 Plug with Pin Insert (Banding Version)

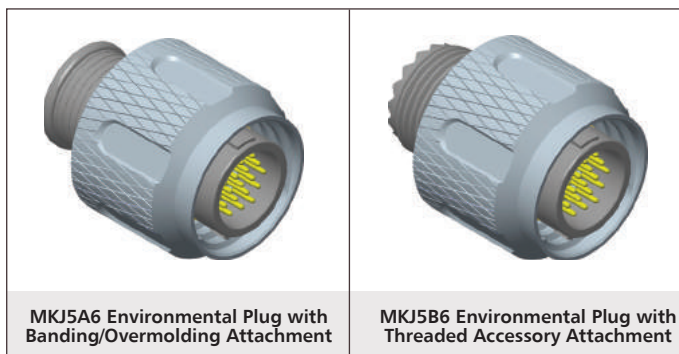


How to Order – MKJ5 Plug

Banded & Accessory Thread

Product	MKJ5 (Triple Start)	MKJ5	A	6	F	11-19	P	A	**
Class:	<ul style="list-style-type: none"> A - Environmental Plug with Banding/Overmolding Attachment B - Environmental Plug with Threaded Accessory Attachment 								
Shell Style:	<ul style="list-style-type: none"> 6 - Straight Plug 								
Material/Plating:	<ul style="list-style-type: none"> C - Aluminum/Anodize, Black F - Aluminum/Electroless Nickel (RoHS) K - Stainless Steel/Passivated (RoHS) T - Aluminum/Teflon Nickel (RoHS) W - Aluminum/Olive Drab Cadmium Y - Stainless Steel/Electroless Nickel, Black (RoHS) Z - Aluminum/Zinc Nickel, Black (RoHS) N - Stainless Steel/Electroless Nickel (RoHS) 								
Shell Size/Contact Arrangement:	See Available Layouts on Pages 10–11								
Contact Style:	<ul style="list-style-type: none"> P - Pin, Crimp, Removable S - Socket, Crimp, Removable E - Pin, Solder Cup, Potted, Non-removable F - Socket, Solder Cup, Potted, Non-removable 								
Shell Clocking	<ul style="list-style-type: none"> A - Normal B, C, D, E, F - Alternatives 								
Modification Codes:	<ul style="list-style-type: none"> - F0 - Less Contacts ("F0" not stamped on the connector, but must be included on the P.O.) - F256 - Stainless Steel Hood (Socket contact only) - 518 - Potted connectors with water immersion testing (10⁻⁴ Helium leak tested) 								

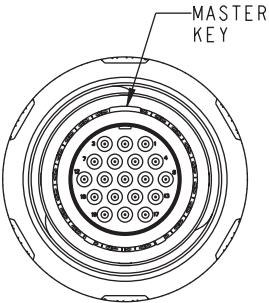
Consult factory for other modification codes



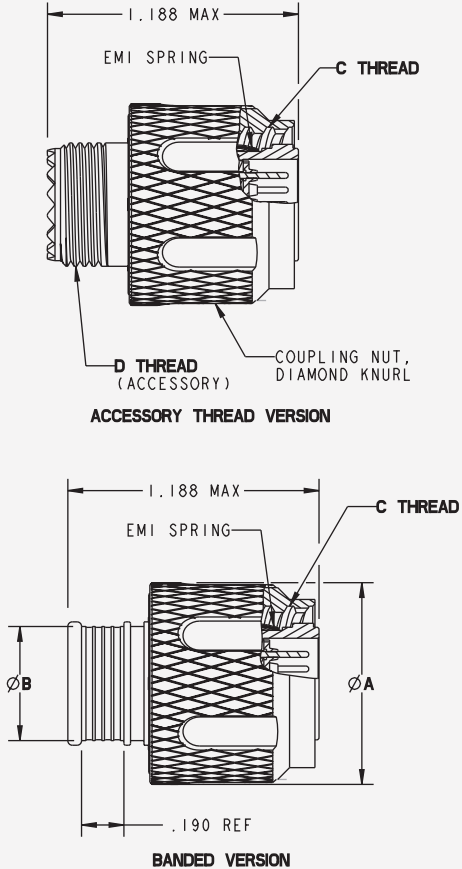
MKJ5 Plug

Banded & Accessory Thread

Cable Plug Dimensions				
Shell Size	ØA	ØB	C Thread	D Thread Accessory UNEF-2A
8	0.691	0.317	.5000-.1P-.3L-TS-2B	.3750-32
9	0.787	0.397	.5625-.1P-.3L-TS-2B	.4375-28
10	0.826	0.473	.6250-.1P-.3L-TS-2B	.5000-28
11	0.916	0.519	.6875-.1P-.3L-TS-2B	.5625-24
12	0.982	0.585	.7500-.1P-.3L-TS-2B	.6250-24
15	1.097	0.687	.9375-.1P-.3L-TS-2B	.7500-20
18	1.290	0.884	1.1250-.1P-.3L-TS-2B	.9375-20
19	1.311	0.884	1.1875-.1P-.3L-TS-2B	.9375-20



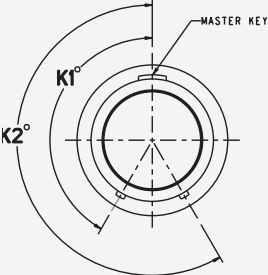
FRONT VIEW



ACCESSORY THREAD VERSION

BANDED VERSION

For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

Cable Plug Barrel Clocking Dimensions			
MKJ5 PLUG BARREL CLOCKING	Position	K1°	K2°
	A (Normal)	150°	210°
	B	75°	210°
	C	95°	230°
	D	140°	275°
	E	75°	275°
	F	95°	210°

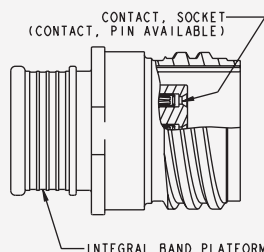
MKJ5 Receptacle

In-Line, Box Mount (Square Flange), Jam Nut Rear Panel Mount Banded & Accessory Thread

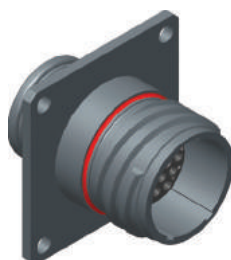
MKJ5 In-Line Receptacle (Shown with Banding/Overmolding Attachment)



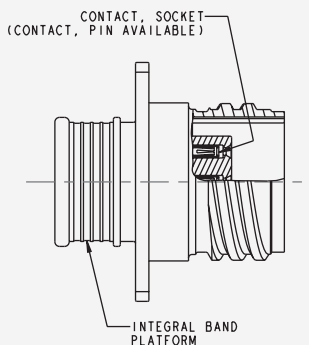
MKJ5 In-Line Receptacle with Socket Insert (Banding Version)



MKJ5 Box Mount Receptacle – Square Flange (Shown with Banding/Overmolding Attachment)



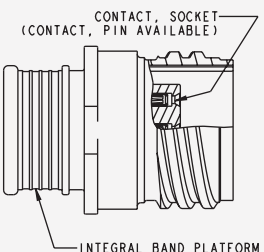
MKJ5 Box Mount Receptacle (Square Flange) with Socket Insert (Banding Version)



MKJ5 Jam Nut Receptacle – Rear Panel Mount (Shown with Banding/Overmolding Attachment)



MKJ5 Jam Nut Receptacle with Socket Insert (Banding Version)

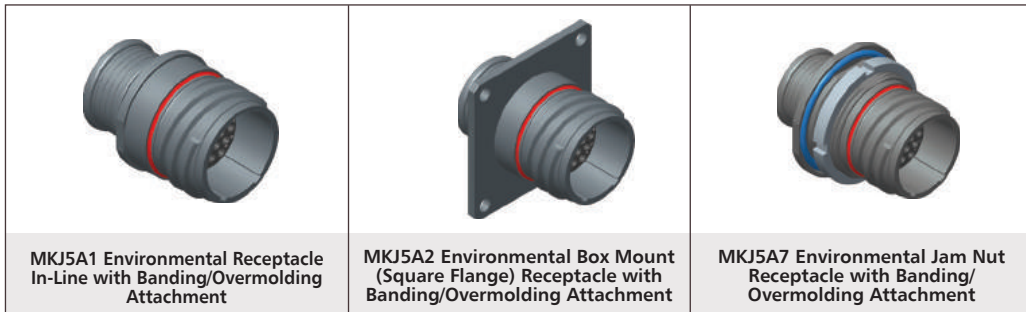


How to Order – MKJ5 Receptacle

In-Line, Box Mount (Square Flange), Jam Nut Rear Panel Mount Banded & Accessory Thread

Product	MKJ5 (Triple Start)								
	MKJ5	A	7	F	11-19	P	A	**	
Class:	A -	Environmental Receptacle with Banding/Overmolding Attachment							
	B -	Environmental Receptacle with Threaded Accessory Attachment							
Shell Style:	1 -	In-Line Receptacle							
	2 -	Box Mount Receptacle (Square Flange)							
	7 -	Jam Nut Receptacle-Rear Panel Mount							
Material/Plating:	C -	Aluminum/Anodize, Black							
	F -	Aluminum/Electroless Nickel (RoHS)							
	K -	Stainless Steel/Passivated (RoHS)							
	T -	Aluminum/Teflon Nickel (RoHS)							
	W -	Aluminum/Olive Drab Cadmium							
	Y -	Stainless Steel/Electroless Nickel, Black (RoHS)							
	Z -	Aluminum/Zinc Nickel, Black (RoHS)							
	N -	Stainless Steel/Electroless Nickel (RoHS)							
Shell Size/Contact Arrangement:	See Available Layouts on Pages 10–11								
Contact Style:	P -	Pin, Crimp, Removable							
	S -	Socket, Crimp, Removable							
	E -	Pin, Solder Cup, Potted, Non-removable							
	F -	Socket, Solder Cup, Potted, Non-removable							
Shell Clocking:	A -	Normal							
	B, C, D, E, F	Alternatives							
Modification Codes:	- F0	Less Contacts ("F0" not stamped on the connector, but must be included on the P.O.)							
	- F256	Stainless Steel Hood (Socket contact only)							
	- 518	Potted connectors with water immersion testing (10 ⁻⁴ Helium leak tested)							

Consult factory for other modification codes



MKJ5 Receptacle

In-Line

Banded and Accessory Thread

Cable Receptacle In-Line Dimensions					
Shell Size	ØA	B Flat	C Thread	ØD	F Thread Accessory UNEF-2A
8	0.540	0.510	.5000-.1P-.3L-TS-2A	0.317	.3750-32
9	0.605	0.575	.5625-.1P-.3L-TS-2A	0.397	.4375-32
10	0.668	0.638	.6250-.1P-.3L-TS-2A	0.473	.5000-28
11	0.730	0.700	.6875-.1P-.3L-TS-2A	0.519	.5625-24
12	0.793	0.763	.7500-.1P-.3L-TS-2A	0.585	.6250-24
15	0.980	0.950	.9375-.1P-.3L-TS-2A	0.687	.7500-20
18	1.165	1.135	1.1250-.1P-.3L-TS-2A	0.884	.9375-20
19	1.235	1.205	1.1875-.1P-.3L-TS-2A	0.884	.9375-20

FRONT VIEW

ACCESSORY THREAD VERSION

BANDED VERSION

For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

Cable Receptacle In-Line Shell Clocking Dimensions			
MKJ5 SHELL CLOCKING	Position	K1°	K2°
		A (Normal)	150°
B		75°	210°
C		95°	230°
D		140°	275°
E		75°	275°
F		95°	210°

Dimensions shown in inches (mm)
 Specifications and dimensions subject to change

MKJ5 Receptacle

Box Mount (Square Flange)

Banded and Accessory Thread

Receptacle Box Mount Dimensions										
Shell Size	ØA	B	C, Basic Typ	D Thread	ØE	ØF +.003	G Thread, Accessory (UNEF-2A)	H, Basic	ØJ	ØK
8	1.150	0.850	0.660	.5000-.1P-.3L-TS-2A	0.317	0.094	.3750-32	0.660	0.520	0.094
9	1.230	0.913	0.723	.5625-.1P-.3L-TS-2A	0.397	0.094	.4375-28	0.723	0.584	
10	1.330	0.975	0.785	.6250-.1P-.3L-TS-2A	0.473	0.094	.5000-28	0.785	0.653	
11	1.410	1.039	0.848	.6875-.1P-.3L-TS-2A	0.519	0.094	.5625-24	0.848	0.718	
12	1.500	1.099	0.909	.7500-.1P-.3L-TS-2A	0.585	0.094	.6250-24	0.909	0.775	0.128
15	1.750	1.288	1.058	.9375-.1P-.3L-TS-2A	0.687	0.128	.7500-20	1.058	0.961	
18	2.000	1.475	1.255	1.1250-.1P-.3L-TS-2A	0.884	0.128	.9375-20	1.255	1.140	
19	2.094	1.537	1.327	1.1875-.1P-.3L-TS-2A	0.884	0.128	.9375-20	1.327	1.230	

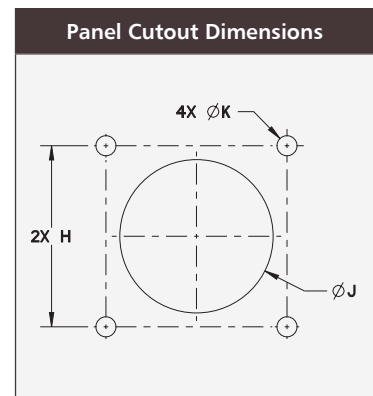
FRONT VIEW

ACCESSORY THREAD VERSION

BANDED VERSION

For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

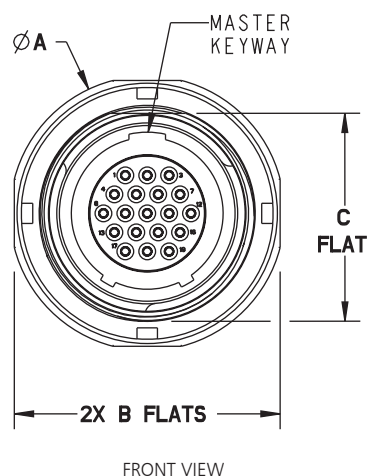
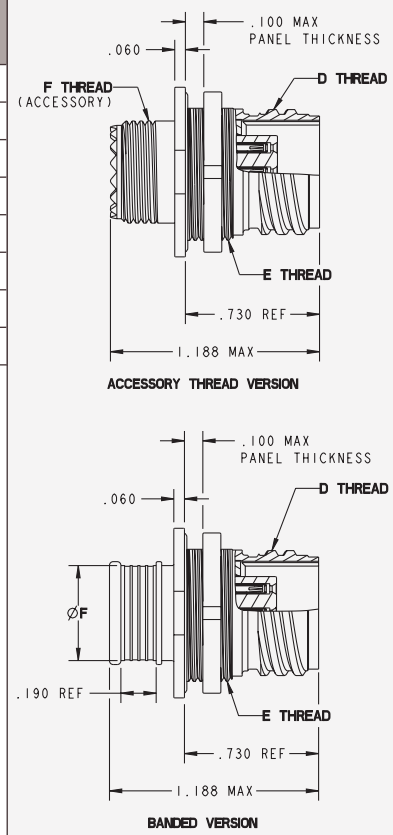
Receptacle Box Mount Shell Clocking Dimensions			
MKJ5 SHELL CLOCKING	Position	K1°	K2°
		A (Normal)	150°
B		75°	210°
C		95°	230°
D		140°	275°
E		75°	275°
F		95°	210°



MKJ5 Receptacle

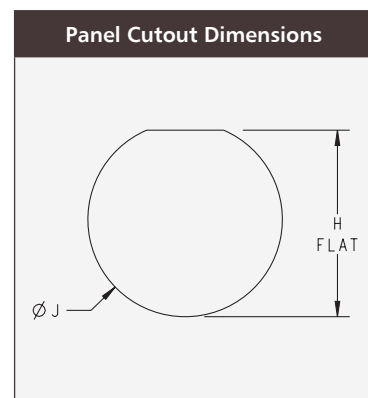
Jam Nut – Rear Panel Mount Banded and Accessory Thread

Cable Receptacle Jam Nut Dimensions									
Shell Size	DIA. ØA	ØB FLATS	C Flat	D Thread	E THREAD (UN-2A)	ØF	G THREAD ACCESSORY (UNEF-2A)	H Flat	ØJ
8	0.760	0.730	0.535	.5000-.1P-.3L-TS-2A	.5625-32	0.317	.3750-32	0.543	0.572
9	0.880	0.850	0.661	.5625-.1P-.3L-TS-2A	.6875-28	0.397	.4375-28	0.669	0.698
10	0.880	0.850	0.661	.6250-.1P-.3L-TS-2A	.6875-28	0.473	.5000-28	0.669	0.698
11	0.955	0.925	0.721	.6875-.1P-.3L-TS-2A	.7500-28	0.519	.5625-24	0.729	0.760
12	1.060	1.035	0.784	.7500-.1P-.3L-TS-2A	.8125-28	0.585	.6250-24	0.792	0.822
15	1.203	1.173	0.970	.9375-.1P-.3L-TS-2A	1.0000-28	0.687	.7500-20	0.978	1.010
18	1.389	1.359	1.147	1.1250-.1P-.3L-TS-2A	1.1875-28	0.884	.9375-20	1.155	1.198
19	1.450	1.420	1.221	1.1875-.1P-.3L-TS-2A	1.2500-28	0.884	.9375-20	1.223	1.385



For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

Cable Receptacle Jam Nut Shell Clocking Dimensions			
MKJ5 SHELL CLOCKING	Position	K1°	K2°
		A (Normal)	150°
B		75°	210°
C		95°	230°
D		140°	275°
E		75°	275°
F		95°	210°



Dimensions shown in inches (mm)
Specifications and dimensions subject to change

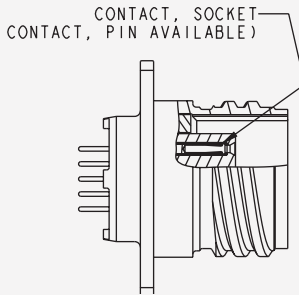
MKJ5 Receptacle

Box Mount (Square Flange), Jam Nut Rear Panel Mount
 Potted, PCB & Solder Cup

MKJ5 Box Mount Receptacle – Square Flange – PCB Mount



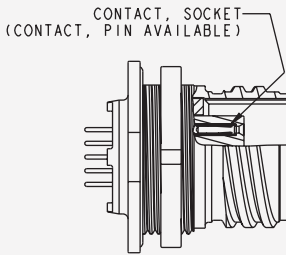
MKJ5 Box Mount Receptacle (Square Flange)
 with PCB Mount Socket Insert



MKJ5 Jam Nut Receptacle – Rear Panel Mount – PCB Mount



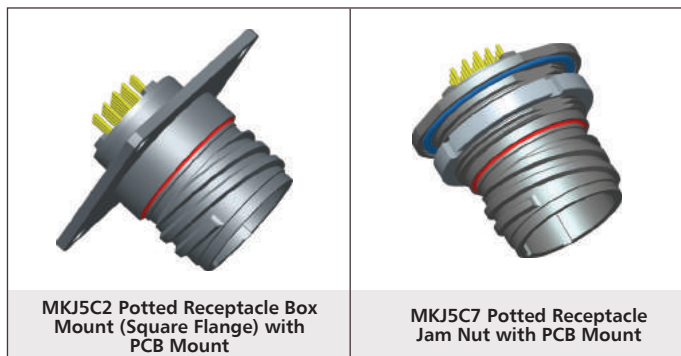
MKJ5 Jam Nut Receptacle
 with PCB Mount Socket Insert



How to Order – MKJ5 Receptacle

Box Mount (Square Flange), Jam Nut Rear Panel Mount
Potted, PCB & Solder Cup

Product	MKJ5 (Triple Start)								
	MKJ5	C	2	F	11-19	B	A	**	
Class:	C -	Potted Receptacle-PC/Flex/Solder							
Shell Style:	2 -	Box Mount Receptacle (Square Flange)							
	7 -	Jam Nut Receptacle-Rear Panel Mount							
Material/Plating:	C -	Aluminum/Anodize, Black							
	F -	Aluminum/Electroless Nickel (RoHS)							
	K -	Stainless Steel/Passivated (RoHS)							
	T -	Aluminum/Teflon Nickel (RoHS)							
	W -	Aluminum/Olive Drab Cadmium							
	Y -	Stainless Steel/Electroless Nickel, Black (RoHS)							
	Z -	Aluminum/Zinc Nickel, Black (RoHS)							
N -	Stainless Steel/Electroless Nickel (RoHS)								
Shell Size/Contact Arrangement:		See Available Layouts on Pages 10–11							
Contact Style:	B -	Pin, PC Tail, .109 Extension, Potted, Non-removable							
	D -	Socket, PC Tail, .109 Extension, Potted, Non-removable							
	E -	Pin, Solder Cup, Potted, Non-removable							
	F -	Socket, Solder Cup, Potted, Non-removable							
Shell Clocking:	A -	Normal							
	B, C, D, E, F	Alternatives							
Modification Codes:	- F256	Stainless Steel Hood (Socket contact only)							
	- 518	Potted connectors with water immersion testing (10 ⁻⁴ Helium leak tested) Consult factory for other modification codes							



MKJ5 Receptacle

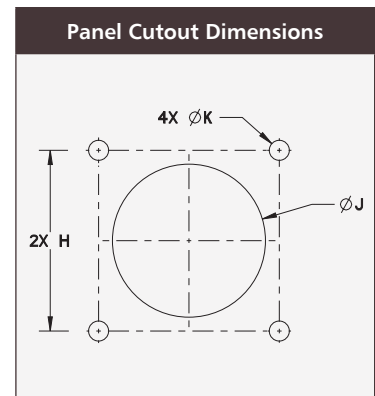
Box Mount (Square Flange)

Potted, PCB & Solder Cup

Receptacle Box Mount Dimensions										
Shell Size	ØA	B	C, Basic Typ	D Thread	ØE	ØF	ØG	H, Basic	ØJ	ØK
8	1.150	0.850	0.660	.5000-.1P-.3L-TS-2A	0.330	0.094	.SIZE 23 .018/.022	0.660	0.520	0.094
9	1.230	0.913	0.723	.5625-.1P-.3L-TS-2A	0.432	0.094		0.723	0.584	
10	1.330	0.975	0.785	.6250-.1P-.3L-TS-2A	0.493	0.094	SIZE 20HD .024/.028	0.785	0.653	
11	1.410	1.039	0.848	.6875-.1P-.3L-TS-2A	0.551	0.094		0.848	0.718	
12	1.500	1.099	0.909	.7500-.1P-.3L-TS-2A	0.620	0.094	SIZE 16 .060/.064	0.909	0.775	0.128
15	1.750	1.288	1.058	.9375-.1P-.3L-TS-2A	0.703	0.128		1.058	0.961	
18	2.000	1.475	1.255	1.1250-.1P-.3L-TS-2A	0.863	0.128	SIZE 12 .092/.096	1.255	1.140	
19	2.094	1.537	1.327	1.1875-.1P-.3L-TS-2A	0.912	0.128		1.327	1.230	

For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

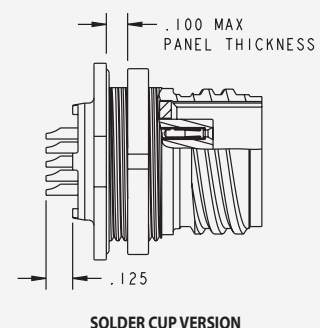
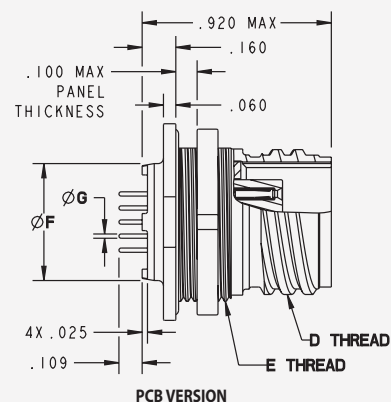
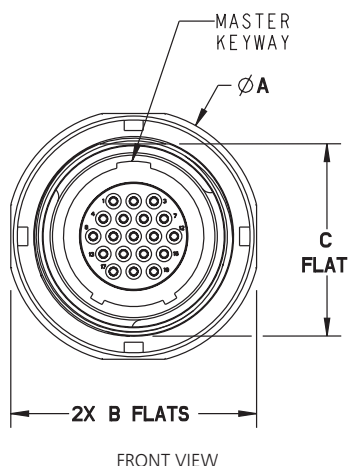
Receptacle Box Mount Shell Clocking Dimensions			
MKJ5 SHELL CLOCKING	Position	K1°	K2°
		A (Normal)	150°
B		75°	210°
C		95°	230°
D		140°	275°
E		75°	275°
F		95°	210°



MKJ5 Receptacle

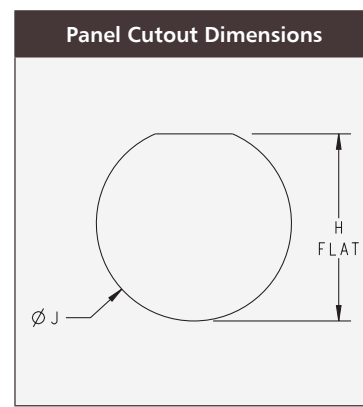
Jam Nut Rear Panel Mount
Potted, PCB & Solder Cup

Receptacle Jam Nut Rear Mount Dimensions									
Shell Size	ØA	B FLATS	C Flat	D Thread	E THREAD (UN-2A)	ØF	ØG	H Flat	ØJ
8	0.760	0.730	0.535	.5000-.1P-.3L-TS-2A	.5625-32	0.330	.SIZE 23 .018/.022	0.543	0.572
9	0.880	0.850	0.661	.5625-.1P-.3L-TS-2A	.6875-28	0.432		0.669	0.698
10	0.880	0.850	0.661	.6250-.1P-.3L-TS-2A	.6875-28	0.493	SIZE 20HD .024/.028	0.669	0.698
11	0.955	0.925	0.721	.6875-.1P-.3L-TS-2A	.7500-28	0.551		0.729	0.760
12	1.060	1.035	0.784	.7500-.1P-.3L-TS-2A	.8125-28	0.620	SIZE 16 .060/.064	0.792	0.822
15	1.203	1.173	0.970	.9375-.1P-.3L-TS-2A	1.0000-28	0.703		0.978	1.010
18	1.389	1.359	1.147	1.1250-.1P-.3L-TS-2A	1.1875-28	0.863	SIZE 12 .092/.096	1.155	1.198
19	1.450	1.420	1.221	1.1875-.1P-.3L-TS-2A	1.2500-28	0.912		1.223	1.385



For all Shell Sizes and Clockings, the Master Keyway remains stationary at top dead center, with minor keys rotating to achieve alternate clocking positions.

Receptacle Jam Nut Shell Clocking Dimensions			
MKJ5 SHELL CLOCKING	Position	K1°	K2°
	A (Normal)	150°	210°
	B	75°	210°
	C	95°	230°
	D	140°	275°
	E	75°	275°
	F	95°	210°



Dimensions shown in inches (mm)
Specifications and dimensions subject to change

MKJ5 Weight Charts

MKJ5 Connector Weight in Grams					
Pin Layout	Plug	Jam Nut Receptacle Crimp	Jam Nut Receptacle PCB	Square Flange Receptacle Crimp	Square Flange Receptacle PCB
8-1P	8.4	6.9	7.0	6.7	5.7
8-23P	8.3	6.7	6.6	6.7	5.5
8-4P	8.1	6.8	6.7	6.8	5.6
8-6P	8.2	6.9	7.0	6.9	5.7
8-7P	8.2	7.0	6.9	7.0	5.8
9-1P	10.7	9.2	9.2	7.0	7.9
9-25P	10.8	9.3	9.2	7.1	8.0
9-10P	11.1	9.2	9.2	7.0	7.9
10-2P	12.9	9.8	9.9	8.7	9.2
10-28P	13.2	9.9	10.1	9.2	9.9
10-13P	12.4	9.6	9.7	8.2	8.6
11-4P	15.1	11.0	12.0	10.2	11.2
11-210P	15.0	11.5	12.2	9.7	10.7
11-19P	15.3	11.2	12.0	9.4	10.4
12-2P	17.1	13.7	15.2	11.6	12.0
12-5P	17.4	13.7	16.1	12.1	13.0
12-26P	17.3	13.2	13.2	10.4	11.2
15-2P	20.5	20.2	21.8	16.9	19.5
15-3P	21.6	21.3	22.9	17.9	20.6
15-7P	22.0	21.6	23.1	18.5	20.9
15-220P	20.9	21.1	23.9	18.4	21.8
15-37P	20.2	20.2	20.4	17.0	19.6
18-12P	30.8	32.4	32.6	27.8	31.5
18-5P	32.2	33.8	33.2	29.4	32.9
18-235P	30.3	31.1	29.3	28.8	30.8
18-55P	27.5	28.0	28.0	25.3	27.0
19-85P	31.0	29.8	29.5	28.4	30.9

MKJ5 Connector Weight in Grams					
Socket Layout	Plug	Jam Nut Receptacle Crimp	Jam Nut Receptacle PCB	Square Flange Receptacle Crimp	Square Flange Receptacle PCB
8-1S	8.8	7.2	7.0	6.2	6.4
8-23S	8.8	7.2	7.2	7.4	6.1
8-4S	8.7	7.1	7.4	7.6	6.3
8-6S	8.7	7.1	7.5	6.1	6.4
8-7S	8.8	7.2	7.0	7.2	5.9
9-1S	11.7	9.8	9.8	7.6	8.5
9-25S	11.4	9.5	9.6	7.5	8.2
9-10S	11.3	9.4	9.4	7.2	8.1
10-2S	13.0	9.8	9.9	9.6	10.0
10-28S	15.8	10.3	10.4	10.0	10.5
10-13S	12.7	10.2	9.8	8.9	9.4
11-4S	15.4	13.0	13.4	11.2	12.2
11-210S	15.3	12.8	13.7	11.1	12.0
11-19S	15.7	12.0	13.0	10.2	11.2
12-2S	18.1	14.8	16.8	13.3	13.5
12-5S	17.7	15.2	17.6	13.1	14.0
12-26S	17.4	13.5	14.4	10.3	11.2
15-2S	22.1	21.8	23.3	18.6	21.0
15-3S	22.3	22.9	24.4	19.7	22.1
15-7S	22.9	24.0	25.5	21.1	23.5
15-220S	23.5	23.5	26.0	21.4	23.7
15-37S	21.4	22.4	23.9	19.2	21.6
18-12S	32.4	34.1	32.6	29.6	32.5
18-5S	33.2	34.9	33.4	30.4	33.3
18-235S	32.1	33.6	32.8	28.1	31.7
18-55S	30.2	30.4	29.0	26.0	28.5
19-85S	32.1	32.6	35.7	28.8	35.6

Cables to Outfit Your MKJ Connector

Value-Added MKJ Series Cabling Solutions from ITT Cannon



Let ITT Cannon complete your MKJ solution with our custom cable products. A complement to the reduction in size of the connectors is the reduction in weight and thickness in cabling. Choose from several available options to help customize your application. Improving on our high reliability connectors, we offer overmolds that are suitable for military requirements in harsh environments.

