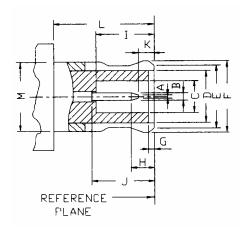


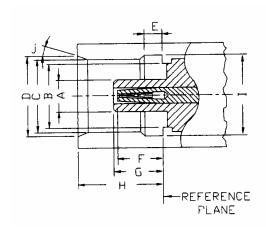
## **MCX**

#### 50 ohm 0 – 6 GHz

MCX microminiature connectors provide repeatable performance from DC to 6 GHz. The design of these devices have taken into consideration the need for size reduction, low weight, durability and reliable performance. The MCX devices enable a 30% space reduction over similar SMB/SMC types. The MCX is available for affixement to industry standard cable and as a printed circuit board device. The "snap-on" connection feature between devices offer the user ease of assembly in dense packaging layouts. Applications for the MCX are those where size, Weight, performance and ease of assembly are the driving considerations to the final design decision. Typically, these include GPS, wireless communications (WLAN and mobile) and automotive.

#### **INTERFACE DIMENSIONS:**





	PLUG	
Letter	Millimeters (Inches)	
	Minimum	Maximum
Α	1	0.25 (.010)
В	0.48 (.019)	0.53 (.021)
С	2.00 (.079)	2.07 (.0815)
D	-	3.00 (.118)
E	1	3.60 (.142)
F	3.63 (.143)	3.80 (.150)
G	0.00 (.000)	0.30 (.012)
Н	-	1.20 (.047)
	2.80 (.110)	3.20 (.126)
J	2.80 (.110)	3.20 (.126)
I/	0.15 ( 006)	
[	4:15 (:Y63)	-
M	-	3.40 (.134)

	JACK	
Letter	Millimeters (Inches)	
	Minimum	Maximum
Α	1.80 (.079)	1.98 (.078)
В	-	3.00 (.118)
С	3.42 (.135)	3.48 (.137)
D	3.80 (.150)	-
Е	0.75 (.029)	0.85 (.033)
F	2.30 (.090)	2.80 (.110)
G	2.60 (.102)	2.80 (.110)
Н	4.00 (.157)	4.12 (.162)
1	3.60 (.142)	3.80 (.150)
J	18°	22°



## **Electrical:**

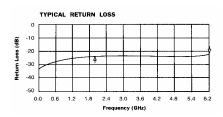
Impedance	50 ohm	
Frequency Range	0 to 6.0 GHz	
VSWR	0-2  GHz = 1.22  max (straight)	
	1.50 max (right angle)	
	2-6 GHz = 1.35 max (straight)	
	1.63 max (right angle)	
Dielectric Withstanding Voltage	RG – 174, 188, 316 $\rightarrow$ 750 volts rms max	
	RG – 178, 196 $\rightarrow$ 500 vlts rms max	
Contact Resistance	center contact = 5.0 Milliohms max	
	outer contact = 2.5 milliohms max	
RF Leakage	-60 dB min	
Insertion Loss	.4 dB max (straight)	
	.6 dB max (right angle)	
Insulation Resistance	1,000 Megohms min	

## Mechanical & Environmental:

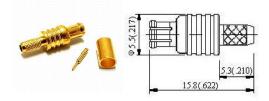
Mating	"Push-pull" snap-on coupling
Durability	500 matings
Cable Retention	RG – 174, 188, 316 $\rightarrow$ 20 lbs min
Temperature Range	-65 ℃ to 165 C°
Vibration	MIL-STD-202 Method 204 Test Cond. B.
Salt Spray	MIL-STD-202 Method 101 Test Cond. B.
Temperature Cycling	MIL-STD-1344 Method 1003 Test Cond. A.

## Material:

	Material	Plating
Connector Body	Brass	Nickel or Gold
Center Contact	Male. Brass	
		Gold
	Female: Beryllium Copper	
Insulation	Teflon	None
Crimp Ferrule	Annealed Copper	Same as Body



# Straight Plug Crimp ( MCX )





PART NO.	APPLICABLE CABLE RG/U
MCX-1101-TGG	174, 188A, 316
MCX-1102-TGG	178, 196

**Description:** Flexible Cable-Crimp Attachment

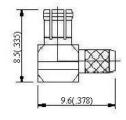
Finish: Gold plated center contact & body

Insulation: Teflon



## Right Angle Plug Crimp (MCX)







PART NO.	APPLICABLE CABLE RG/U
MCX-1105-TGG	174, 188A, 316
MCX-1106-TGG	178, 196

Description:

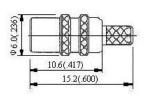
Flexible Cable-Crimp Attachment

Finish: Gold plated center contact & body

Insulation: Teflon

## Straight Jack Crimp (MCX)







PART NO.	APPLICABLE CABLE RG/U
MCX-1203-TGG	174, 188A, 316
MCX-1204-TGG	178, 196

Description:

Flexible Cable-Crimp Attachment

Finish: Gold plated center contact & body

Insulation: Teflon

## Straight Bulkhead Jack Crimp (MCX)





10.5(.413)

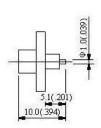
PART NO.	APPLICABLE CABLE RG/U
MCX-1207-TGG	174, 188A, 316
MCX-1208-TGG	178, 196

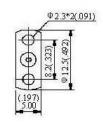
**Description:**Flexible Cable-Crimp Attachment

Finish: Gold plated center contact & body Insulation: Teflon

# 2 Holes Flange Jack Receptacle ( Exposed Teflon ) (MCX)







5.0(.197)

PART NO. MCX-3201-TGG

**Description:**Panel Mount Receptacle

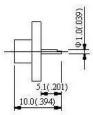
Finish: Gold plated center contact & body

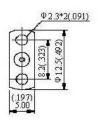
Insulation: Teflon



## 2 Holes Flange Jack Receptacle ( Solder Pot Contact ) (MCX)





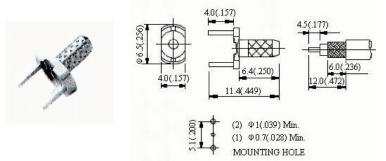


PART NO.
MCX-3202-TGG

**Description:** Panel Mount Receptacle

Finish: Gold plated center contact & body Insulation: Teflon

## PCB Cable Terminal-Crimp Type (MCX)



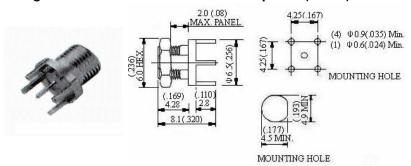
PART NO.
MCX-5004-G

Description:

Printed Circuit Board Receptacles

Finish: Gold plated

## Straight PCB Mount Bulkhead Jack Receptacle (MCX)



PART NO.
MCX-5201-TGG

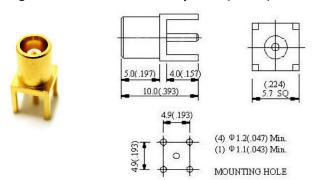
Description:

Printed Circuit Board Receptacles

Finish: Gold plated center contact & body

Insulation: Teflon

## Straight PCB Mount Jack Receptacle (MCX)



PART NO.
MCX-5202-TGG

Description:

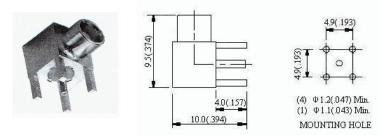
Printed Circuit Board Receptacles

Finish: Gold plated center contact & body

Insulation: Teflon



## Right Angle PCB Mount Jack Receptacle (MCX)

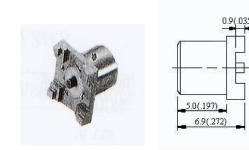


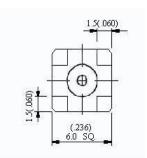
PART NO.
MCX-5203-TGG

**Description:**Printed Circuit Board Receptacles

Finish: Gold plated center contact & body Insulation: Teflon

## Straight Surface Mount Jack Receptacle (MCX)





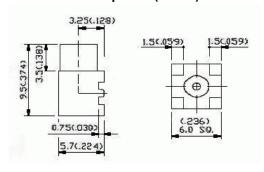
PART NO.
MCX-5205-TGG

**Description:**Surface Mount Receptacle

Finish: Gold plated center contact & body Insulation: Teflon

## Right Angle Surface Mount Jack Receptacle (MCX)



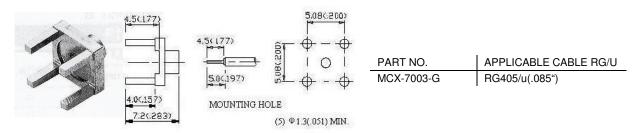


PART NO.
MCX-5206-TGG

**Description:**Surface Mount Receptacle

Finish: Gold plated center contact & body Insulation: Teflon

## PCB Cable Terminal (MCX)

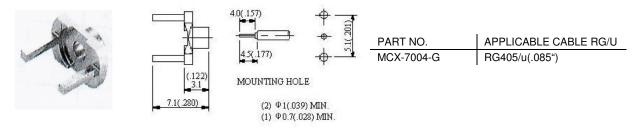


**Description:**For Semi-Rigid Cable (.085" Direct Solder Attachment )

Finish: Gold plated Insulation: Teflon



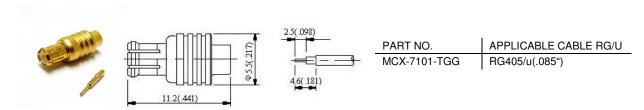
## PCB Cable Terminal ( MCX )



**Description:**For Semi-Rigid Cable (.085" Direct Solder Attachment )

Finish: Gold plated

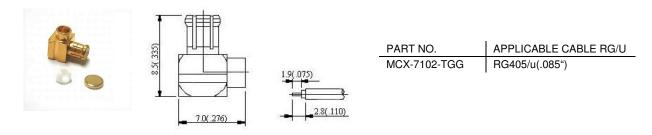
# Straight Plug ( MCX )



**Description:**For Semi-Rigid Cable (.085" Direct Solder Attachment )

Finish: Gold plated center contact & body Insulation: Teflon

## Straight Angle Plug (MCX)



**Description:**For Semi-Rigid Cable (.085" Direct Solder Attachment )

Finish: Gold plated center contact & body Insulation: Teflon