



# MCX Series

## MCX

MCX (Micro-CoaX) series is with a “Snap On” coupling interface, which provides rapid and easy connections. It is similar to the SMB connectors, but this series offers approximately a 30% reduction in size. The impedance of the MCX is 50 or 75 ohms, and it can be operated up to the frequencies of 6GHz. The MCX range is suitable for the standard ranges of flexible & semi-rigid cables, and it is also available as a PCB mounted version.

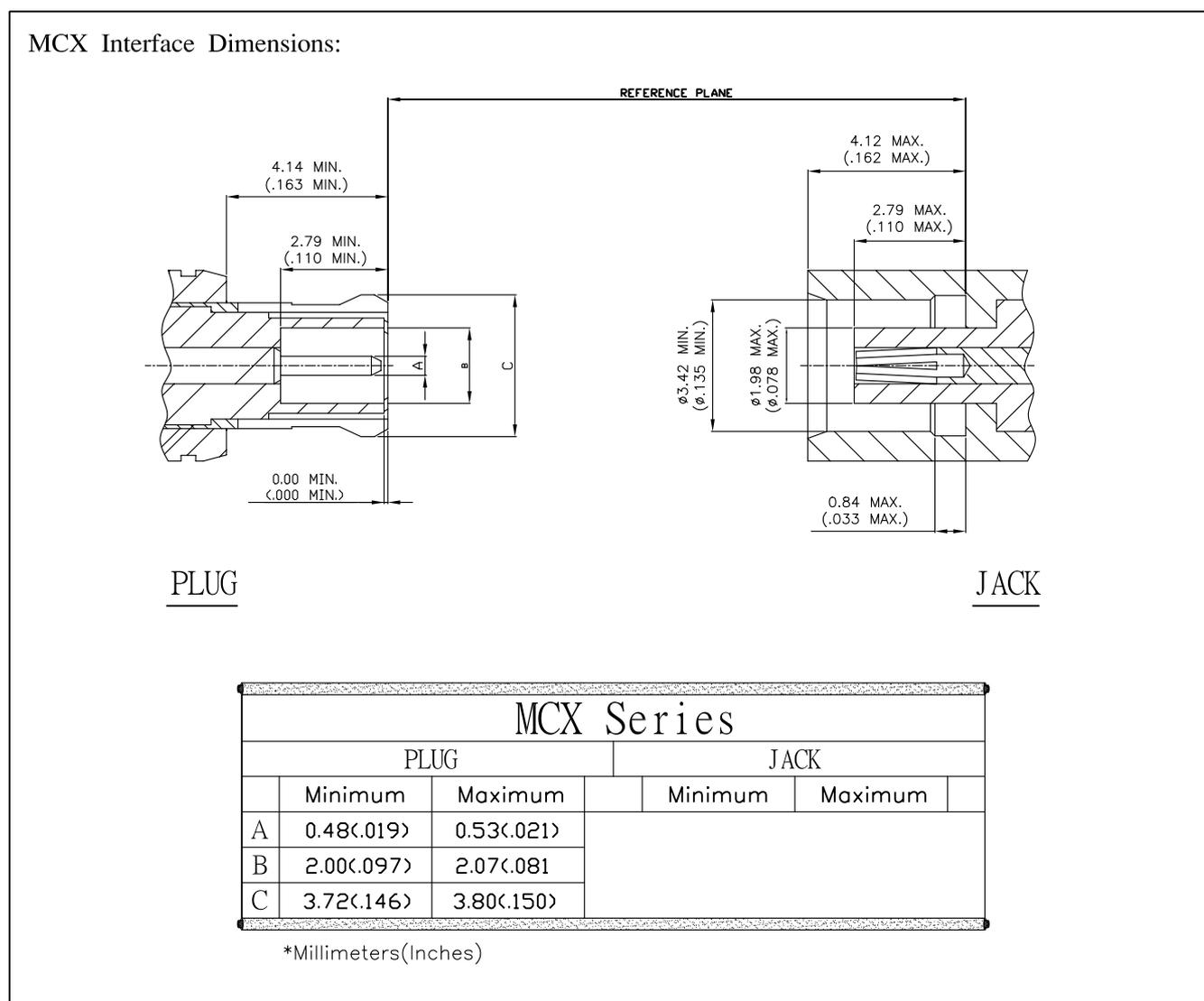
### Applications:

\*GPS \*cellular telephone \*data telemetry \*instrumentation \*wireless \*PC/LAN

### Interface dimensions conformable to the Standards:

International: IEC 169-36

European: CECC 22220





Materials :

Connector part	Material	Finish
Bodies	Brass	Nickel or Gold
Center Contact	Male: Brass Female: Beryllium copper	Gold
Insulator	Teflon	N/A
Crimp ferrule	Anneal copper	Nickel or Gold

Electrical :

Electrical Data	Detail		
Impedance	50 ohm		
Frequency range	0~6 GHz		
Working voltage	RG178/U → 250 volts rms max. RG316/U, semi-rigid → 335 volts rms max.		
Insulation resistance	1,000 megohms min.		
Dielectric withstanding voltage	RG178/U → 750 volts rms max. RG316/U, semi-rigid → 1,000 volts rms max.		
Contact resistance	Center contact: 5.0 milliohm Outer contact: 1.0 milliohm		
VSWR : f (GHz)		Straight	Right angle
	RG-178/U	1.17+0.04f	1.07+0.06f
	RG-316/U, semi-rigid	1.13+0.04f	1.07+0.04f
Insertion loss	0.1 dB max. (straight) 0.2 dB max. (right angle)		

Mechanical :

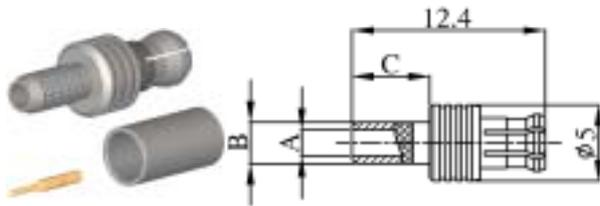
Mechanical Data	Detail
Engagement force	5.6 lbs max.
Disengagement force	3 lbs
Connector durability	500 matings
Cable retention force	RG178/U → 10 lbs min.
	RG316/U → 20 lbs min.
	Semi-rigid → 30 lbs min.

Environmental :

Environmental Data	Detail
Corrosion (Salt spray)	MIL-STD-202 METHOD 101 CONDITION B
Thermal shock	MIL-STD-202 METHOD 107 CONDITION F
Vibration	MIL-STD-202 METHOD 204 CONDITION B
Mechanical shock	MIL-STD-202 METHOD 213 CONDITION B
Temperature range	-65 to 165

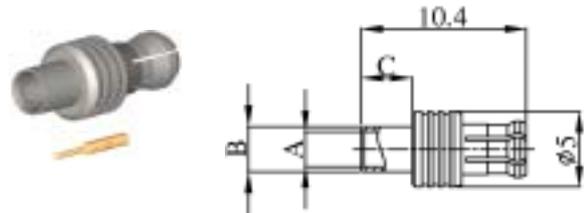
## MCX STRAIGHT PLUG FOR CABLE TYPE

CRIMP FOR FLEXIBLE CABLE



PART NUMBER	A	B	C	CABLE TYPE(RG/U)
MCX-01LV1-TGG	1.7	2.7	5.0	174 , 188A , 316
MCX-01M-TGG	0.9	1.9	5.0	178 , 196
MCX-01N-TGG	1.7	2.7	5.0	179B,187A

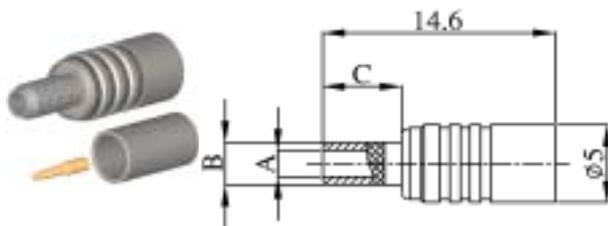
SOLDER FOR SEMI-RIGID CABLE



PART NUMBER	A	B	C	CABLE TYPE(RG/U)
MCX-01V1-TGG	2.3	3.0	3.4	RG405U(.085")
MCX-01V3-TGG	1.4	2.2	3.4	UT-47(.047")

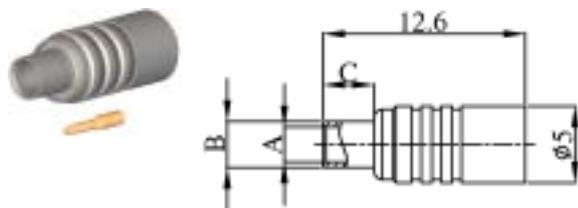
## MCX STRAIGHT JACK FOR CABLE TYPE

CRIMP FOR FLEXIBLE CABLE



PART NUMBER	A	B	C	CABLE TYPE(RG/U)
MCX-02LV1-TGG	1.7	2.7	5.0	174 , 188A , 316
MCX-02M-TGG	0.9	1.9	5.0	178 , 196
MCX-02N-TGG	1.7	2.7	5.0	179B,187A

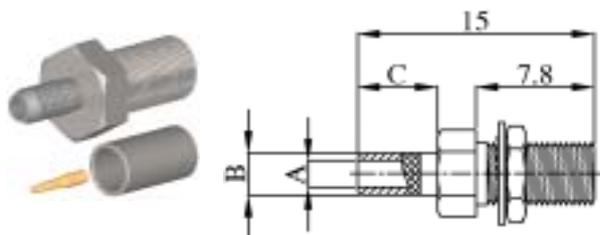
SOLDER FOR SEMI-RIGID CABLE



PART NUMBER	A	B	C	CABLE TYPE(RG/U)
MCX-02V11-TGG	2.3	3.0	3.4	RG405U(.085")
MCX-02V13-TGG	1.4	2.2	3.4	UT-47(.047")

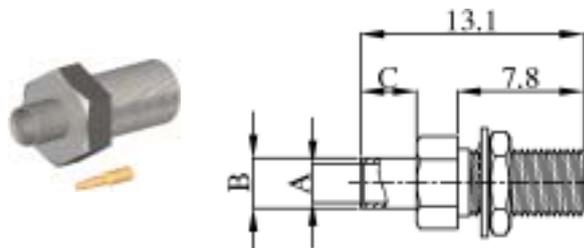
## MCX STRAIGHT JACK BULKHEAD FOR CABLE TYPE

CRIMP FOR FLEXIBLE CABLE



PART NUMBER	A	B	C	CABLE TYPE(RG/U)
MCX-10LV1-TGG	1.7	2.7	5.0	174 , 188A , 316
MCX-10M-TGG	0.9	1.9	5.0	178 , 196
MCX-10N-TGG	1.7	2.7	5.0	179B,187A

SOLDER FOR SEMI-RIGID CABLE

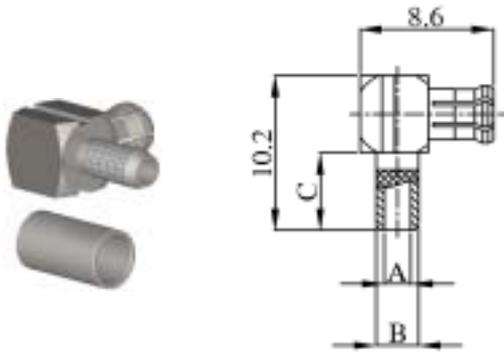


PART NUMBER	A	B	C	CABLE TYPE(RG/U)
MCX-10V1-TGG	2.3	3.0	3.4	RG405U(.085")
MCX-10V3-TGG	1.4	2.2	3.4	UT-47(.047")

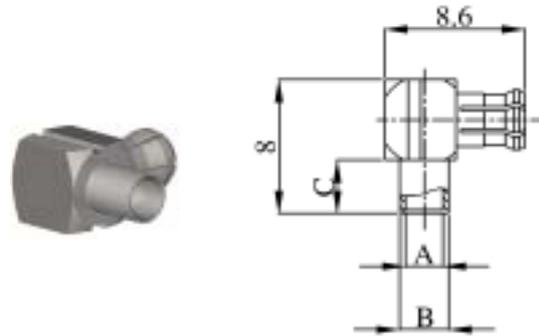


## MCX RIGHT ANGLE PLUG FOR CABLE TYPE

CRIMP FOR FLEXIBLE CABLE



SOLDER FOR SEMI-RIGID CABLE

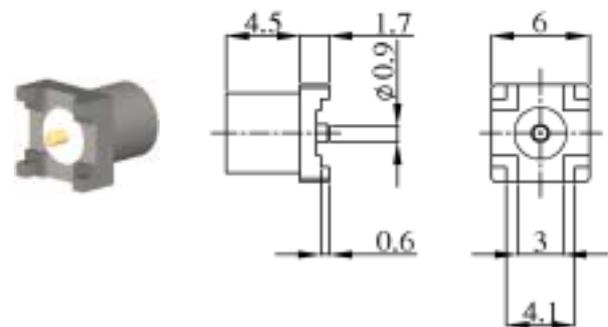
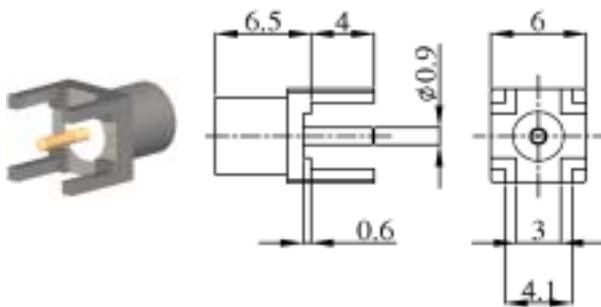


PART NUMBER	A	B	C	CABLE TYPE(RG/U)
MCX-04LV1-TGG	1.7	2.7	5.0	174, 188A, 316
MCX-04M-TGG	1.0	2.0	5.0	178, 196
MCX-04N-TGG	1.7	2.7	5.0	179B, 187A

PART NUMBER	A	B	C	CABLE TYPE(RG/U)
MCX-04V1-TGG	2.3	3	3.4	RG405U(.085")
MCX-04V2-TGG	1.4	2.2	3.4	UT-47(.047")

## MCX STRAIGHT JACK FOR PCB MOUNT

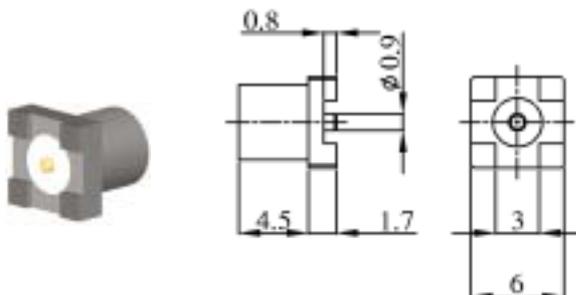
SURFACE MOUNT



PART NUMBER	MCX-05-TGG(-75)
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PART NUMBER	MCX-05V4-TGG(-75)
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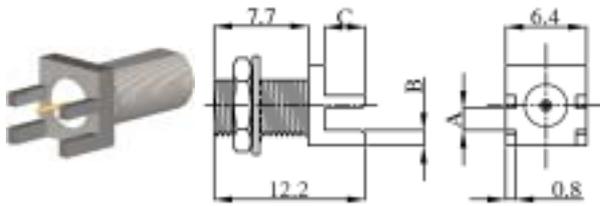
SURFACE MOUNT



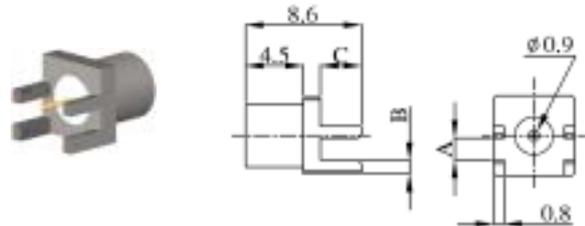
PART NUMBER	MCX-05V5-TGG(-75)
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TGN : IEFロン INSULATION + GOLD PLATED CONTACT + NICKEL PLATED BODY  
 TGG : IEFロン INSULATION + GOLD PLATED CONTACT + GOLD PLATED BODY  
 75 : 75OHM

## MCX STRAIGHT JACK END LAUNCH RECEPTACLE



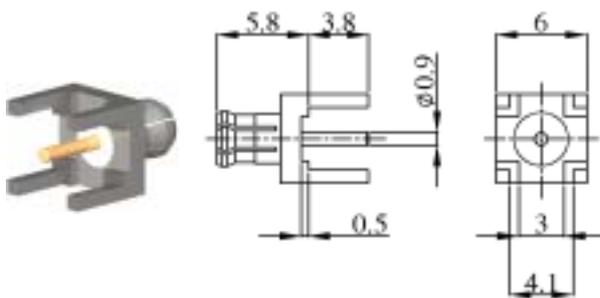
PART NUMBER	BOARD THICKNESS	A	B	C
MCX-09V5-TGG(-75)	1.6	1.1	2.6	1.8
MCX-09V6-TGG(-75)	1.1	0.8	2.6	4.8



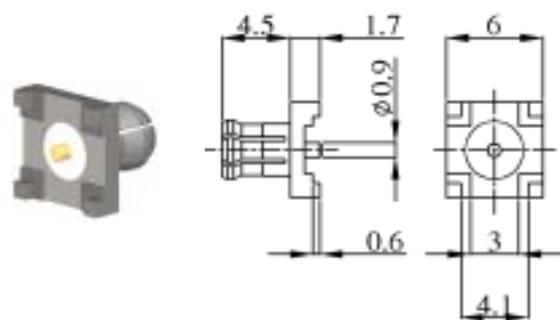
PART NUMBER	BOARD THICKNESS	A	B	C
MCX-05V6-TGG(-75)	1.6	1.1	2.6	1.8
MCX-05V7-TGG(-75)	1.1	0.8	2.6	4.8

## MCX STRAIGHT PLUG FOR PCB MOUNT

SURFACE MOUNT

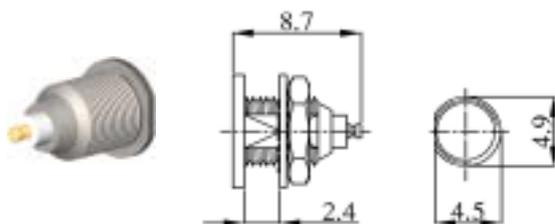


PART NUMBER	MCX-15-TGG(-75)

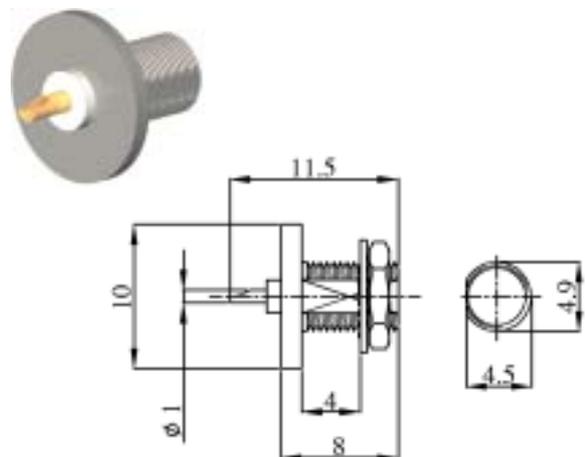


PART NUMBER	MCX-15V4-TGG(-75)

## MCX JACK BULKHEAD RECEPTACLE



PART NUMBER	MCX-17-TGG(-75)

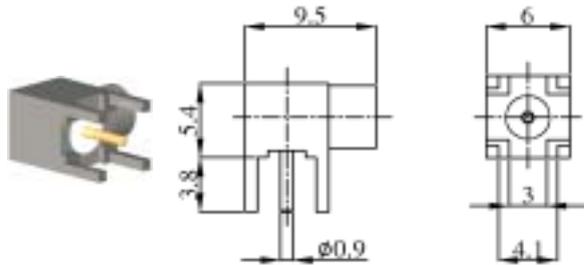


PART NUMBER	MCX-17V4-TGG(-75)

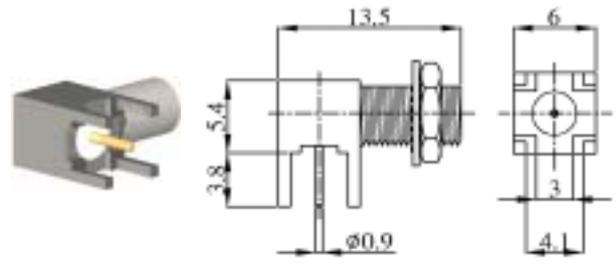
TGN : IEFLOX INSULATION + GOLD PLATED CONTACT + NICKEL PLATED BODY  
 TGG : IEFLOX INSULATION + GOLD PLATED CONTACT + GOLD PLATED BODY  
 75 : 75OHM



## MCX RIGHT ANGLE JACK FOR PCB MOUNT

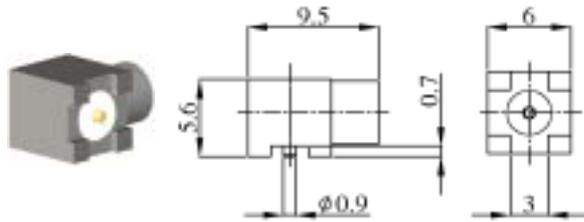


PART NUMBER      MCX-11-TGG



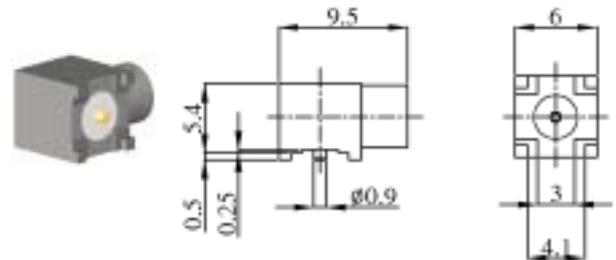
PART NUMBER      MCX-08-TGG

### SURFACE MOUNT



PART NUMBER      MCX-11V4-TGG(-75)

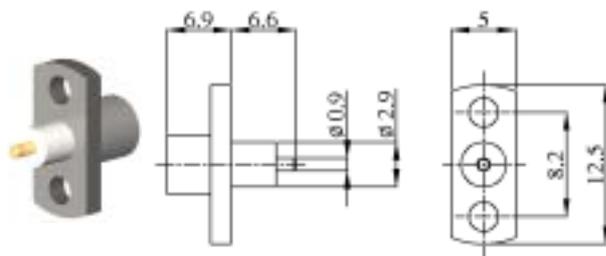
### SURFACE MOUNT



PART NUMBER      MCX-11V5-TGG(-75)

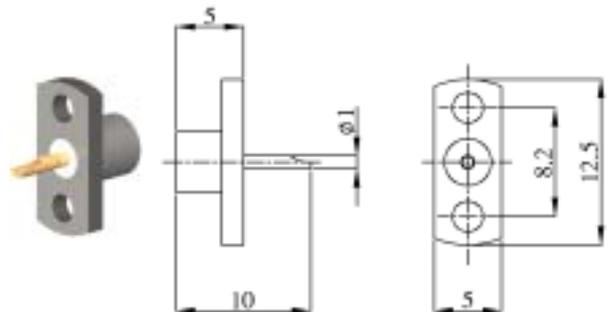
## MCX STRAIGHT JACK 2 HOLES RECEPTACLE

### EXTENDED TEFLON+ BLUNT POST CONTACT



PART NUMBER      MCX-16-TGG(-75)

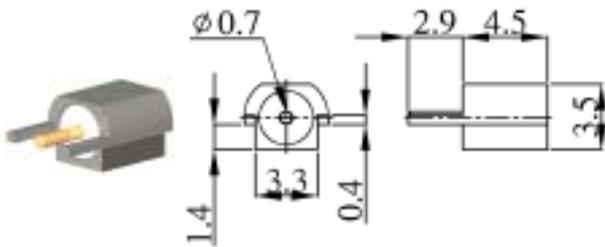
### FLUSH TEFLON+ SOLDER POT CONTACT



PART NUMBER      MCX-16V4-TGG9(-75)

TGN : IEFLON INSULATION + GOLD PLATED CONTACT + NICKEL PLATED BODY  
 TGG : IEFLON INSULATION + GOLD PLATED CONTACT + GOLD PLATED BODY  
 75 : 75OHM

## MCX JACK PCB END LAUNCH



PART NUMBER	MCX-14-TGG
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TGN : IEFロン INSULATION + GOLD PLATED CONTACT + NICKEL PLATED BODY  
 TGG : IEFロン INSULATION + GOLD PLATED CONTACT + GOLD PLATED BODY  
 75 : 75OHM