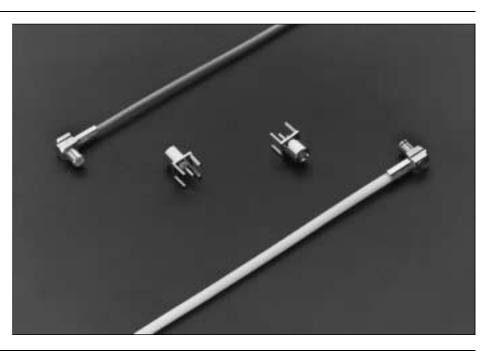
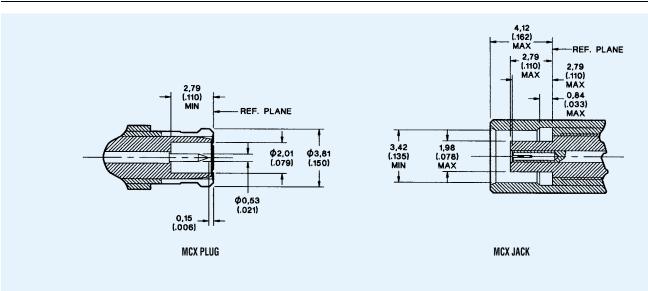
### Introduction

The microminiature MCX Connector has a simple but firm retention mechanism and operates in a frequency range up to 6 GHz. It is suitable for 50  $\Omega$  applications where RF screening is necessary. The small size of the MCX connector, between SMB and SSMB, allows a close packing of the components and the push-on/pull-off mating allows a rapid connect/disconnect facility. The MCX is particularly suited to applications in portable equipment or designs where space is a constraint. It is also popular in cellular telephony and information systems.



### Mating Interfaces



# **RF** Coaxial Connectors

### Specification

ELECTRICAL	Impedance	50 $\Omega$ nominal
Frequency Range		0 to 6.0 GHz
Working Voltage		335 Vrms
Insulation Resistance		1000 MΩ
Contact Resistance		5.0 m $\Omega$ maximum
Voltage Standing Wave Ratio (VSWR)		1.28 maximum
Outer Conductor Continuity		<u>2.5 mΩ</u>
	Insertion Loss	0.1 dB maximum @ 1 GHz
MECHANICAL	Engagement Force	15 N (3.4 lbs.) maximum
	Disengagement Force	20 N (4.5 lbs.) maximum. 10 N (2.25 lbs.) minimum
	Cable Retention Force	>60 N (13.5 lbs.) maximum
Termination		Outer conductor: Crimp. Inner conductor: Solder
	Materials	Bodies, Body Components and Male Contact: Brass. Tine Body and Female Contact: Beryllium copper Insulator: PTFE. Ferrule: Annealed copper alloy.
	Finish/Plating	Center Contact: Gold plated. Other metal parts gold or nickel plated (as specified)
ENVIRONMENTAL	Operating Temperature	–55° C to 155° C
GENERAL	Connector Durability	500 matings minimum

**Body Plating Options** 

The following part number suffices can be specified for MCX connectors:

...T90 = gold plate ...220 = gold plate ...C90 = nickel plate

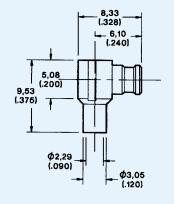
65

MCX

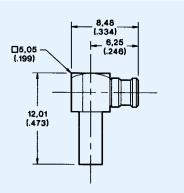
Plugs / Jacks

#### **Right Angle Cable Plug**

Part Number	Cable Number
051-C11-9072220	RG405/U



Assembly Instruction AI-755 (Page 126)



## Dart Number

**Right Angle Cable Plug** 

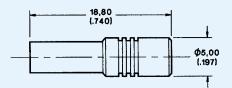
051-C28-9019T90	RG178/U, 196/U
051-C28-9029T90	RG174/U, 316/U

Cable Numbers

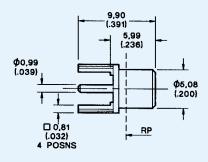
**Cable Numbers** 

RG174/U, 316/U

### Assembly Instruction BBAI-1212 (Page 110)



#### Assembly Instruction AI-772 (Page 129)



Mounting Plan B (Page 108)

### **Straight PCB Jack**

Straight Cable Jack

Part Number

051-C23-9188220

Part Number 051-C51-9039T90



# Dimensions are shown in mm (inch) Dimensions subject to change