

Custom Connectors



INTRODUCTION

Amphenol CIT's custom design facility has vertically integrated manufacturing capability allowing for the machining of custom designs, manufacturing of specialty mold tooling, in-house molding (plastic and rubber) and specialty in-house assembly. This capability allows us to manufacture specialty non-filtered connectors and interconnects for unique applications. Specialty features may include non-standard shells and layouts, materials, locking mechanisms, and spring loaded contacts to mention a few. In addition, any

of these special designs can incorporate filtering and/or Transient Voltage Suppression protection.

CAPABILITIES

- » 3-D Design capability
- » In-house Machining
- » In-house Micro to Medium Size Molding (UL certification option available)
- » In-house Harness Overmolding
- » In-house Assembly
- » In-house Testing

DESIGN CONSIDERATIONS

Connector	EMI/RF	Filter Types	Termination	Mounting Hardware	Environmental
Circular	Filter	C	PC Tail	Clinch Nut	Thermal Cycle
Rectangular	Non-Filter	Pi	Soldercup	Helicoil	Thermal Shock
Other	High Speed RF Contacts	C-L/L-C	Crimp	Board Mounting Flange	Burn-in
		T	Flying Lead	Jam Nut	Immersion
			Cable Assembly	Adapter Shell	
			Overmold	Jack Posts	

Custom Connectors

Connectors are designed to meet customer specifications and the applicable MIL Specification requirements.

MECHANICAL & ENVIRONMENTAL PERFORMANCE

Test Description	Procedure
Temperature Cycling	Method 1003, MIL-Std-1344, Condition A
Moisture Resistance	MIL-STD-202, Method 106
Durability	500 Matings at a rate of 200 ± 100 cycles per hour
Shock	Method 2004, MIL-STD-1344, Test Condition D
Vibration	Method 2005, MIL-STD-1344, Test Condition VI, Letter J, 8 Hours longitudinal and perpendicular axes
Fluid Immersion	MIL-STD-1344, Method 1016, Fluids (a) and (d)
Salt Spray	MIL-STD-202, Method 101, Condition B
Humidity	MIL-STD-1344, Method 1002, Condition B



Burn-in, thermal shock and thermal cycle testing available in-house



Zoned ovens ensure control over solder reflow



Automated solder dip equipment



Automated potting controls process and quality



Cellular manufacturing