



### SPECIFICATION STANDARDS

The following tables describe, in brief, Glenair flex and rigid flex manufacturing formats and specifications. Glenair recommends commercial customers understand and adhere to IPC-6012/6013 specification standards which are fully supported by Glenair. Military customers may alternatively cite specifications IAW MIL-PRF-31032.

\* Information below is based on the most common materials and physical property requirements. Please consult the factory for alternatives

#### Flex Assemblies

<b>Manufacturing Formats</b>	Gerber • DXF • Altium
<b>Layer Count</b>	Max typ. up to 8
<b>Termination</b>	Thru hole • Reverse bare • Floating fingers / Sculpted circuits • ZIF Termination
<b>Conductor Width/Space</b>	Lines: .004" • Spacing: .004"
<b>Bend Radius (military)</b>	Single Metal Layer: 4–6X overall flex thickness • Double Metal Layers: 6–10X overall flex thickness • Multi Layer Metal: 12–15X overall flex thickness
<b>Materials / Tg</b>	Substrate: DuPont™ Kapton® polyimide flex adhesive and adhesiveless -60°C to 125°C Cover layer: DuPont™ Kapton® Stiffener: FR4 or DuPont™ Kapton® (metal stiffeners available upon request) Conductor: Copper, Aluminum, SS, Constantan High-temperature materials available
<b>Surface Finish</b>	ENIG • HASL • Immersion Tin and Silver
<b>Specs and Quality Management</b>	IPC-6013 Class I, II, III, types 1-3 • ISO 9001, AS 9100

#### Rigid Flex Assemblies

<b>Manufacturing Formats</b>	Gerber • DXF • Altium
<b>Max Panel Thickness</b>	Range of thicknesses from .010" to as thick as .250"
<b>Layer Count</b>	20 +
<b>Via Technology</b>	Blind, buried • Thru hole • Filled (conductive and non-conductive)
<b>Conductor Width/Space</b>	Lines: .004" • Spacing: .004"
<b>Materials / Tg</b>	Substrate: FR4: 180° C
<b>Surface Finish</b>	ENIG • HASL • Immersion Tin and Silver
<b>Specs and Quality Management</b>	IPC-6013 Class I, II, III, type 4 • ISO 9001, AS 9100

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