

## For Solder - In Filters :

When soldering these devices in place, care should be taken to minimize the thermal shock to the capacitors.

**DO NOT** plunge the filter directly into a solder pot without preheating. If pretinning the filter in a solder pot, **DO NOT** put directly into cleaning solutions without allowing it to cool down first.

A controlled temperature profile not exceeding 6°F (3°C) per second is recommended when soldering filters. Although EMI/RFI filters can withstand temperature extremes, rapid heat-up or cool-down can crack the internal ceramic capacitor. Preheating of the filter prior to soldering should be performed wherever possible at 250/300 °F (120/150 °C).

When soldering to terminal of a filter, a heat sink should be always be used adiecent to the body of the filter. 60-40 solder is recommended for filter installation into chassis as well as soldering to terminals. When soldering to terminals using an iron, use a temperature controlled soldering iron (15-20 Watts) with tip temperature of 525°F ( 275°C) maximum. The dwell on the solder joint should be less then 5 seconds.

If a filter style without an eyelet is being soldered into a chassis, iron processes should be avoided and the recommended solder alloy is 60-38-2.

Machine/oven soldering should be at 385-415°F (195-210°C) using a dwell and cycle time fast enough to reflow the solder and ramped to maintain less then 6°F (3°C) per second of rise change.

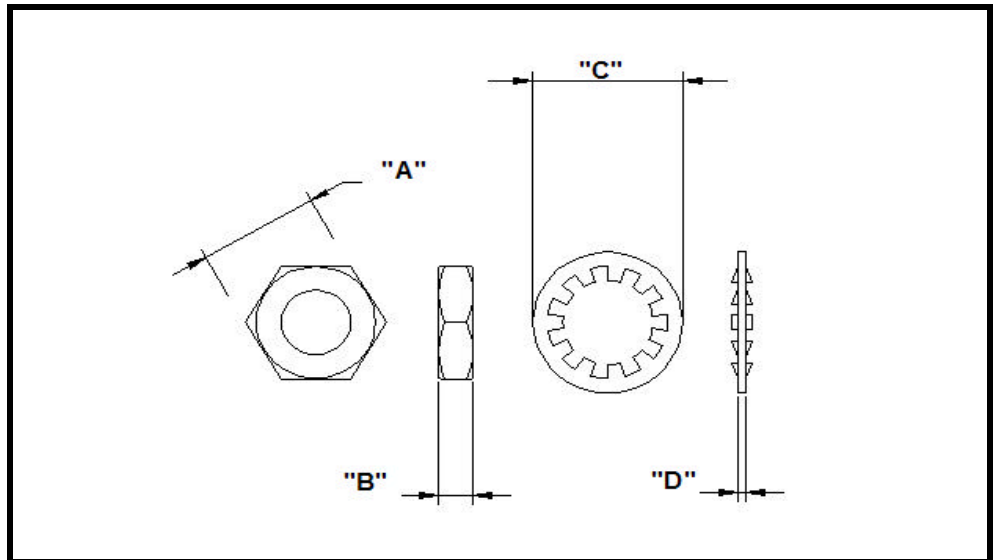
When iron soldering to filter body, preheat components at 250-300°F (120-150°C), solder iron is recommended to be set at 500-550°F (260-290°C). The dwell on the solder joint should be less then 5 seconds. The time is dependent on the heat sinking provided by the chassis so a longer preheat maybe required.

## Bolt - Style Filters.

All INTEC EMI-RFI filters are supplied complete with mounting hardware.

Maximum recommended mounting torque must be applied to the nut only and observed as outlined in the table below. Exceeding recommended mounting torque may result in damage of the capacitor within the filter.

Avoid bending or flexing terminals at the same point of exit from the glass or epoxy seal to preserve the integrity of seal and / or ceramic capacitor.



## Nut and Washer Dimensions and Recommended Torque

		4 - 40 UNC - 2A	8 - 32 UNC - 2A	12 - 32 UNEF - 2A	1/4 - 28 UNF - 2A	5/16 - 24 UNF - 2A
<b>Hex Nut</b>	<b>"A"</b>	0.180 - 0.187 (4,57 - 4,75)	0.241 - 0.250 (6,12 - 6,35)	0.241 - 0.250 (6,12 - 6,35)	0.308 - 0.311 (7,82 - 7,90)	0.365 - 0.377 (9,27 - 9,58)
	<b>"B"</b>	0.057 - 0.067 (1,45 - 1,70)	0.063 - 0.073 (1,60 - 1,85)	0.063 - 0.073 (1,60 - 1,85)	0.091 - 0.096 (2,31 - 2,44)	0.091 - 0.096 (2,31 - 2,44)
<b>Washer</b>	<b>"C"</b>	0.215 - 0.225 (5,46 - 5,72)	0.275 - 0.285 (6,99 - 7,24)	0.372 - 0.383 (9,45 - 9,73)	0.396 - 0.408 (10,06 - 10,36)	0.425 - 0.435 (10,80 - 11,05)
	<b>"D"</b>	0.010 - 0.020 (0,025 - 0,051)	0.015 - 0.025 (0,038 - 0,064)	0.013 - 0.023 (0,033 - 0,058)	0.015 - 0.021 (0,038 - 0,053)	0.017 - 0.027 (0,043 - 0,069)
<b>Recommended Torque</b>		1,5 in.-lb	4 in.-lb	6 in.-lb	7 in.-lb	7 in.-lb