



## MOUNTING INSTRUCTIONS FOR C070D-KNS CLAMPS

This type of clamp has preloaded cup shaped springs (Bellville Washers), which guarantee the exact clamping force and perpendicularity of the clamping force. When the washer spins free under the stack of springs it indicates the right clamping force. In order to have a correct mounting, the following is recommended:

1. The two contact surfaces of semiconductor should be covered with a thin coating of an approved electrical joint compound.
2. Locate the semiconductor on one of the two heat sinks centrally by using a locating pin. Be sure to check the polarity of the device. The semiconductor should be rotated to spread the compound.
3. Position the second heat sink on the semiconductor and locate it centrally by using a second pin and rotate the heat sink to spread the compound.
4. Mount the clamp on the heat sinks and hand tighten each bolt, checking the alignment of heat sinks and semiconductor to make sure the heat sinks are parallel.
5. Tighten alternately both bolts each time about 1/6 turn until the indicating washer spin freely without resistance. Tighten each bolt 1/10 turn more. Do not tighten beyond this point.



## MOUNTING INSTRUCTIONS C089D-KNS and C102B-KNS CLAMPS

This type of clamp has preloaded cup shaped springs (Bellville Washers), which guarantee the exact clamping force and perpendicularity of the clamping force. When the washers under the stack of bellvilles spin free it indicates the achievement of the right clamping force. In order to have a correct mounting, the following is recommended:

1. The two contact surfaces of semiconductor should be covered with a thin coating of an approved electrical joint compound.
2. Locate the semiconductor on one of the two heat sinks centrally by using a locating pin. Be sure to check the polarity of the device. The semiconductor should be rotated to spread the compound.
3. Position the second heat sink on the semiconductor and locate it centrally by using a second pin. Then slightly rotate the heat sink to spread the compound.
4. Mount the clamp on the heat sinks and hand tighten each bolt, checking the alignment of heat sinks and semiconductor to make sure the heat sinks are parallel before starting to tighten the bolts with a wrench.

### **21-24KN Clamps**

Tighten alternately both bolts each time about 1/6 turn until both indicating washers spin freely without resistance. Tighten each bolt 1/8 turn more. After 3 hours tighten each bolt an additional 1/8 of a turn.

### **14-18KN Clamps**

Tighten alternately both bolts each time about 1/6 turn until both indicating washers spin freely without resistance. Tighten each bolt 1/8 turn more. Do not tighten any more beyond this point.



## MOUNTING INSTRUCTIONS FOR C140 KNS, C155A KNS, C170A KNS CLAMPS

This type of clamp uses the elasticity of the bar material. The indicator of the load force is a tang which is fixed on one side and free on the other. The perpendicularity of the load force is guaranteed by a proper floating joint. In order to have a correct mounting, the following is recommended:

1. The two contact surfaces of semiconductor should be covered with a thin coating of an approved joint compound and then any surplus should be removed.
2. Locate the semiconductor on one of the two heat sinks centrally by using provided pin after having checked the polarity. The semiconductor should be rotated to spread the compound.
3. Position the second heat sink on the semiconductor and locate it centrally by using a second pin and rotate the heat sink to spread the compound.
4. Mount the clamp on heat sinks and hand tighten each bolt, checking the alignment of the heat sinks and semiconductor to make sure the heat sinks are parallel before starting to tighten the nuts with a wrench.
5. Tighten alternately the nuts about 1/6 turn each until the clamping force indicator arm snaps into the indent on the top bar. Tighten an additional 1/12 of a turn.

In case of disassembly of the clamp for a possible replacement of the semiconductor, before loosening the nuts, flex the force indicator arm slightly outward to the point that it gets free from the bar.