B12-NM-SMT as a SMT mechanical PCB support block and PCB heat sink

10-32 x 5/16 Phillips screw and external tooth washer

Overhang/gap of B12-NM-SMT and circuit board to prevent excess strain on solder

No overhang of B12-NM-SMT required on the side using the nylon screw

Board to case heat sink/support, cools PCB by heat transmission to case

Board to air heat sink

Expansion air gap

#10-32 x 1/2 Nylon 66 Set Screw with Slotted Drive

Circuit board may also be mounted above the B12-SMT-PCB and can help reduce strain on solder connections.

Powerbus, Heat Sink, Case Mount, PCB Spacer and Power/Ground Connector Block

PCB, Bus, or Heat Sink

Heat Flow

PCB

Heat Flow

Recommended clearance hole diameter on panel casing is 0.2"

Case/PCB thickness recommended no greater than 0.1" (2.5mm)

BOM: (2) B12-NM-SMT-RLM-KIT

B12-NM-SMT-RLM-KIT

B12-NM-SMT-N66-KIT

Requires tight fit of the #10-32 Phillips screw and washer, B12 body, and panel casing. Nylon 66 set screw needs to bottom out in B12-NM-SMT.

Loose fit of the nylon 6 set screw "pin" in the clearance hole drilled in the panel casing allows for natural warping and shifting of metal panels without affecting the stability or function of the PCB circuit board and prevents excess mechanical strain on solder of B12 bodies to the circuit board.

Recommended clearance hole diameter on panel casing is 0.2"

Case/PCB thickness recommended no greater than 0.1" (2.5mm)

BOM: (1) B12-NM-SMT-RLM-KIT
          (1) B12-NM-SMT-N66-KIT