LAMINATED BUS BAR SOLUTIONS

EXPERTISE FROM DESIGN THROUGH MANUFACTURE

NOTES:
1) Conductors: .060 thk. Ex: 1.824 A110
2) Insulation: External Amron 6-5S (.006 thk) Internal Amron 6-5-5S (.013 thk)
3) Tin plate .0001- .0003 thk per ASTM B545
4) Bus bar design: Laminated edge seal. Perimeter not shown edge sealed for clarity
5) Hipot test unit @ 2500 VDC
Many Uses of Laminated Bus Bars
Laminated bus bar is an engineered current carrying component consisting of layers of fabricated copper separated by thin dielectric materials, laminated into a unified structure. Laminated bus bars are used to conduct current in power electronics, Silicon Carbide (SiC) inverters, alternative energy, transportation, industrial and military applications to name a few markets. They can be applied to power distribution systems as well as low voltage control signal designs. Bus bars can replace traditional wiring.

Benefits
Bus bars reduce system costs, improve reliability, increase capacitance, and eliminate wiring errors. They also lower inductance and impedance. Plus, the physical structure of bus bars offers unique features in mechanical design. Multilayer bus bars offer a structural integrity that wiring methods just can’t match.

Silicon Carbide (SiC) Applications
As SiC devices can operate at much higher switching frequencies, parasitic inductance and “skin effect” phenomena become crucial considerations for bus bar designs. Mersen engineering teams can work closely with customers to design bus bars to compensate for “skin effect” and to build the most efficiently cooled power bus bar solution.

Mersen designs and builds prototypes to ensure our customers’ performance needs are met.
Please contact us at Busbar.ROC@lbb.mersen.com or call us at +1 585 784 2500

FL-BUS-BAR-002 | 02.16 | PDF | © Mersen 2016