

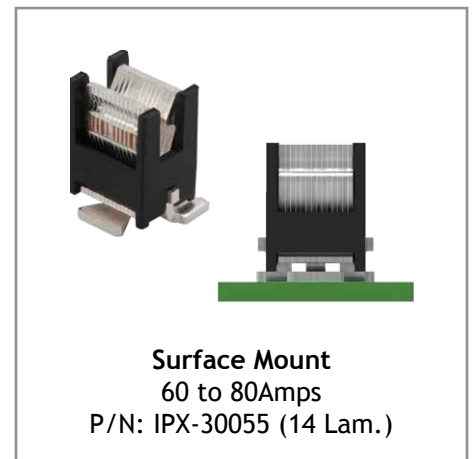
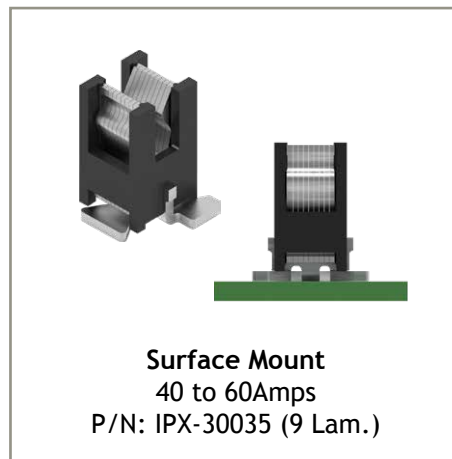
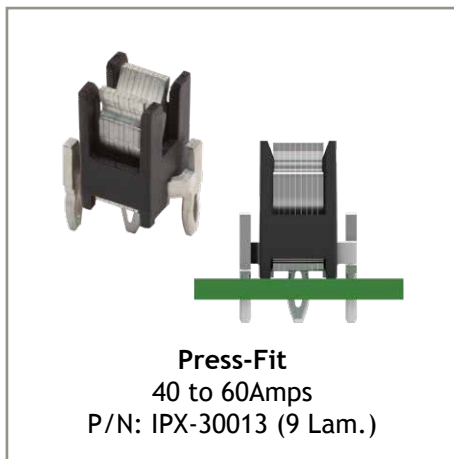
BusMate®

Power Busbar Connector System

- Low and high voltage applications
- Compact size
- Excellent ampacity-size ratio
- Accommodates large mating tolerances: offset and angular
- Separable & pluggable
- PCB Mount: Press-Fit and SMT
- Customizable and scalable
- High temperature construction: 125°C



Product Offerings



Applications

- Hybrid Vehicle Power Systems
- High and Low Voltage Power Systems
- DC to DC Converters
- On-Board Chargers
- 48V Traction Motors and Pumps
- Power Mechatronics
- Charging Systems

Industries



Automotive



Industrial & Infrastructure



Transportation



Energy



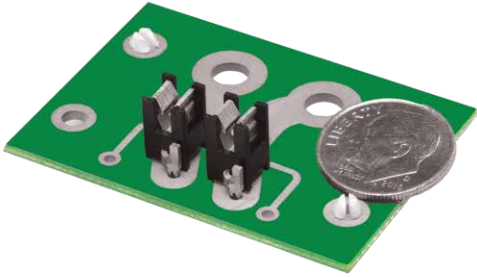
Datacom & Telecom



Medical & Life Sciences

SMALL FOOTPRINT

LARGE AMPACITY-SIZE RATIO

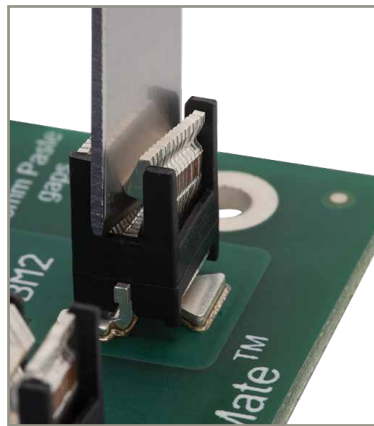
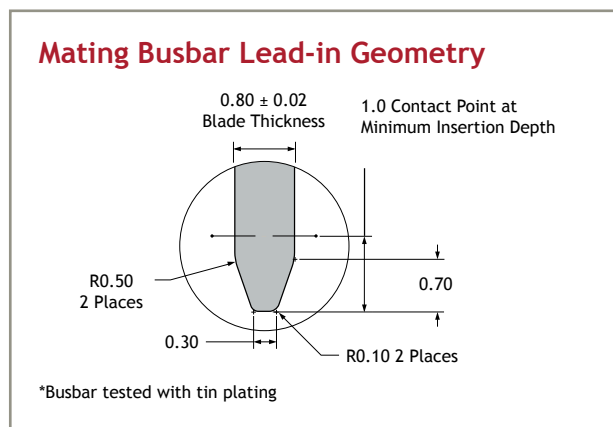
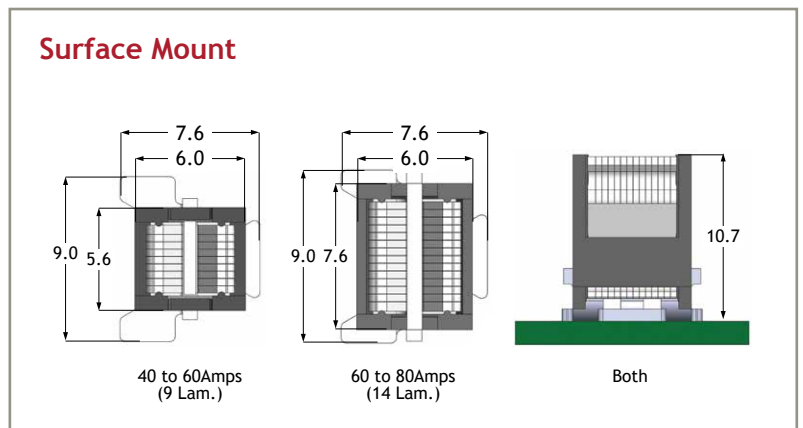
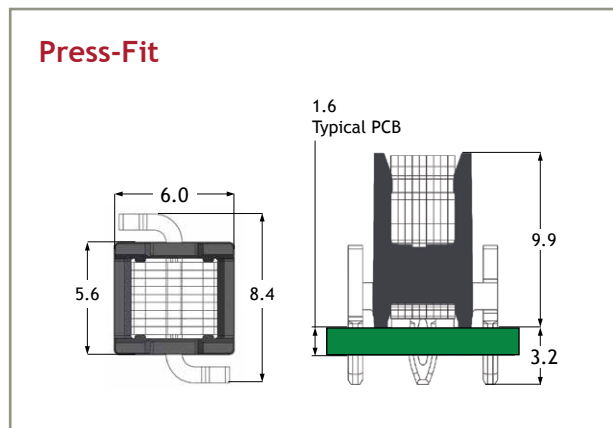


DC Current	P/N: IPX-30013 9 Lam. Press-Fit	P/N: IPX-30035 9 Lam. SMT	P/N: IPX-30055 14 Lam. SMT
40Amps	23 °C	25 °C	17 °C
60Amps	51 °C	53 °C	34 °C
80Amps	N/A	N/A	59 °C

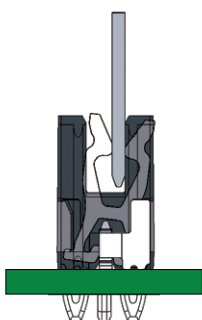
Rise Over Ambient (ROA) Temperatures:
Ambient Temperature 23 °C

BASIC DIMENSIONS

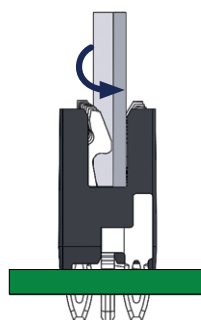
Reference: Application DWGs #IPX30013/35/55 | All dimensions in mm



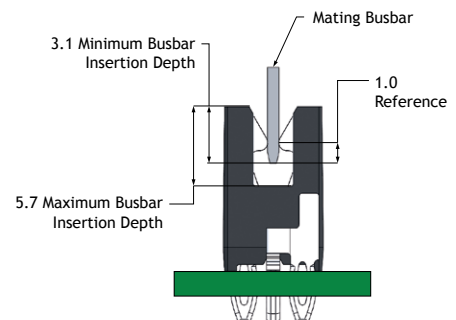
LARGE BUSBAR ASSEMBLY TOLERANCES



Offset
+/- 0.8mm



Twist
9 Lam. up to: +/- 16 Degrees
14 Lam. up to: +/- 12 Degrees



Insertion Depth

PERFORMANCE SPECIFICATIONS

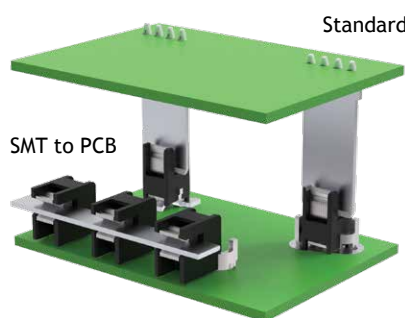
Test Temperature -40°C to 125°C

Description	Part Number
40 to 60Amps (9 Lam. PF ¹)	IPX-30013
40 to 60Amps (9 Lam. SMT ²)	IPX-30035
60 to 80Amps (14 Lam. SMT ²)	IPX-30055

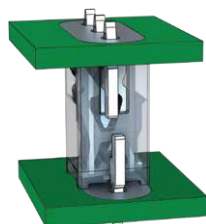
Validation Test	Description	Specification	Test Criteria		Test Results		Conclusion
Insertion Force	9 Lam. PF	Top Mating Busbar	Average:	90N +/- 10N	Average:	90N	Pass
	9 Lam. SMT			70N +/- 10N		72N	
	14 Lam. SMT			100N +/- 10N		98N	
4-Wire Contact Resistance	9 Lam. PF	SAE/USCAR2-6 5.3.1	Max Resistance: less than 1.5mΩ		Max:	0.104mΩ	Pass
	9 Lam. SMT					0.097mΩ	
	14 Lam. SMT					0.077mΩ	
Current Rating	9 Lam. PF	SAE/USCAR2-6 5.3.3	Constant Current at 55°C ROA:	> 40Amps	Average:	> 60Amps	Pass
	9 Lam. SMT			> 60Amps		> 58Amps	
	14 Lam. SMT			> 60Amps		> 77Amps	
Current Cycling	9 Lam. PF	SAE/USCAR2-6 5.3.4	ROA at rated current: < 55°C	> 40Amps	Max ROA:	46°C	Pass
	9 Lam. SMT			> 60Amps		46°C	
	14 Lam. SMT			> 60Amps		42°C	
Mechanical Shock	9 Lam. PF	SAE/USCAR2-6 5.4.6	No discontinuity (1 microsecond increment) Visual Inspection		Not Applicable		Pass
Vibration with Thermal Cycling	9 Lam. SMT						
	14 Lam. SMT						
	9 Lam. PF	GMW 3191 4.4.2	Max Resistance: < 1.5mΩ		Max:	0.118mΩ	Pass
9 Lam. SMT	0.122mΩ						
14 Lam. SMT	0.084mΩ						
Temperature Cycling with Humidity	9 Lam. PF	SAE/USCAR2-6 5.6.2	Max Resistance: < 1.5mΩ		Max:	0.136mΩ	Pass
	9 Lam. SMT					0.112mΩ	
	14 Lam. SMT					0.071mΩ	
High Temperature Humidity Exposure	9 Lam. PF	GMW 3191 4.4.4	Max Resistance: < 1.5mΩ		Max:	0.118mΩ	Pass
	9 Lam. SMT					0.120mΩ	
	14 Lam. SMT					0.087mΩ	
High Temperature Exposure - Dry	9 Lam. PF	SAE/USCAR2-6 5.6.3	Max Resistance: < 1.5mΩ		Max:	0.121mΩ	Pass
	9 Lam. SMT					0.115mΩ	
	14 Lam. SMT					0.084mΩ	
Mixed Flow Gas	9 Lam. PF	VW75174 EN 60512-11-14	Max Resistance: < 1.5mΩ		Max:	0.141mΩ	Pass
	9 Lam. SMT					0.122mΩ	
	14 Lam. SMT					0.094mΩ	

¹ PF stands for Press-Fit ² SMT stands for Surface-Mount Technology

CUSTOMIZED OPTIONS



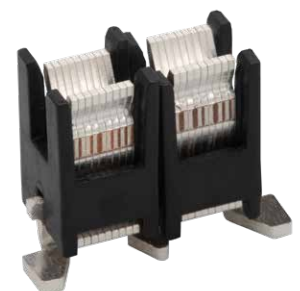
Horizontal Busbar to PCB Mount



Power PCB to PCB



Busbar to Busbar



Customized Dual High-Power

ENGINEERING AND DEVELOPMENT (IPD)

The Interplex Product Development (IPD) team offers innovative, applications-engineered solutions to our customers' most difficult challenges. Our dynamic team of technical professionals utilizes emerging technologies to develop customized products designed for optimal manufacturability and industrialization. With 9 locations across the globe, we bring the highest quality solutions to our customers, wherever they are.



INTERPLEX PRODUCT DEVELOPMENT

DESIGN

INDUSTRIALIZE

VALIDATE

CUSTOMER DESIGN TEAM

CUSTOMER MANUFACTURING TEAM



Interplex is the world's leading designer and manufacturer of customized interconnect, high-precision and mechanical solution provider focused on key megatrends around Decarbonization of Transportation, Future Mobility, Increased Longevity and Digitalization. Interplex has established a leading position in key fast-growing markets: Electronification of Cars, Autonomous Driving, Medical & Life Sciences and Cloud. Our unique product offering, speed and agility is unmatched in the industry thanks to a unique combination of electromechanical (interconnect) and mechanical (high-precision) design skills.

Technology and innovation define us; customization sets us apart. With over 100 years of expertise, key OEMs and Tier 1s trust us to design, develop and manufacture best-fit solutions to reduce their Total Cost of Ownership (TCO). Our global footprint spans 25+ locations across 13 countries and 10 R&D centers enabling us to work closely with customers to truly provide **Any solution, Anywhere™**.

Be a part of the next revolution.