AVX Corporation continues to develop new connectors and accessories specifically for the Solid State Lighting (SSL) market. This 2nd generation brochure captures our entire family of Board-to-Board and Wire-to-Board connectors in a simple matrix format with additional application views. All of these connectors have been developed based on customer application requirements with simplicity, modularity and reliability as the key driving factors. AVX is committed to the SSL market, our technology road map contains leading edge passive electronic components and connectors to meet the demanding market requirements for the future lighting systems. Today we offer:

CONNECTORS

- Wire to Board – Series 9175, 9176, 9177
- Board to Board – Series 9159

CIRCUIT & TRANSIENT PROTECTION

- TransGuard – VC Series
- MultiGuard – MG Series
- EMI Filters – W2/W3 Series
- TransFeed – V2F Series

CAPACITORS

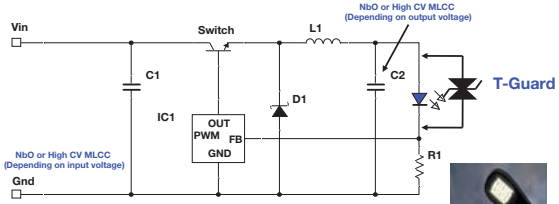
- Input Capacitors – OxiCap® (fail / safe), HiCV, Flexiterm®
- Output Capacitors – Oxicap® (fail / safe), Flexiterm®, HiCV
- Capacitor Array – voltage doublers
- BestCap® (supercapacitor) – LED Camera Flash

Products used in:

- Off-line AC (120 V or 220 V)
- Low voltage 12 to 24 VAC / DC
- Specialty Applications 37.5V, 75V, etc.
- Battery Operation 3v to <12v

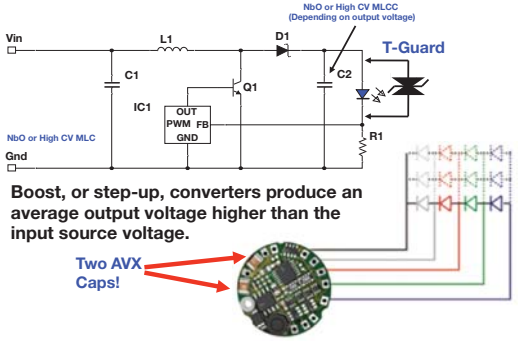
Typical Schematics

LED Driver Topologies – BUCK



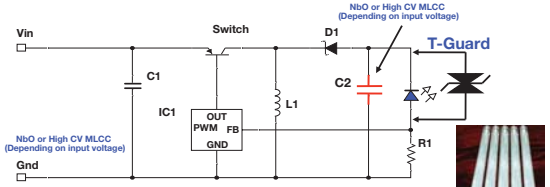
Buck, or step-down, voltage converters produce an average output voltage lower than the input source voltage.

LED Driver Topologies – BOOST



Boost, or step-up, converters produce an average output voltage higher than the input source voltage.

LED Driver Topologies – BUCK/BOOST



- **A combination of buck and boost.**
- **Output is inverted, and its magnitude can be less or greater than the input.**

NOTICE: Specifications are subject to change without notice. Contact your nearest AVX Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable, but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated or that other measures are indicated or that other measures may not be required. Specifications are typical and many not apply to all applications.

A KYOCERA GROUP COMPANY

www.avx.com

S-SSL10M1009-N

AVX INTERCONNECT

A KYOCERA GROUP COMPANY

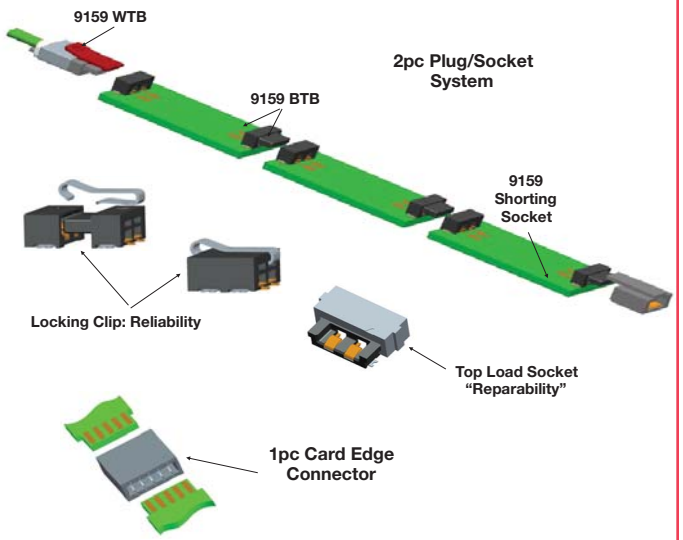
NEW PRODUCT UPDATE

Solid State Lighting Connector Update

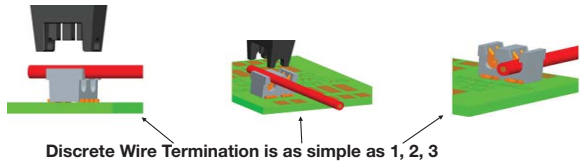
	Wire-to-Board (WTB)				
Application Overview	Discrete WTB for ruggidized applications; SSL, Transportation, Industrial and Commercial				
Series	**11-9159**	**00-9175**	**00-9176**	**70-9176**	**00-9177**
Description	2pc WTB Connector	WTB Connector	WTB Connector	WTB Contact	WTB Connector
Color Options	Black or White	Black or White	Black or White	Black or White	Black or White
Part Number	11 9159 00x 101 116	00 9175 00x 001 006	00 9176 00x 0xx 106	70 9176 001 5xx 006	00 9177 00x 0xx x06
Sizes	2p - 6p	2p - 3p	1p - 3p	1p	1p - 3p
Application	Mates with 20-9159	Discrete WTB	Discrete WTB	Discrete WTB	Discrete WTB
Electrical					
Current Rating	5 Amps / Contact	1 Amp / Contact	10 Amps / Contact	10 Amps / Contact	15 Amps / Contact
Voltage Rating	125 VAC	125 VAC	250 VAC	250 VAC	600 VAC
Mechanical					
Wire Size	22-24 AWG w/cover	26-28 AWG	18-24 AWG	18-24 AWG	14-20 AWG
Insulation O.D.	1.1mm to 1.6mm	0.7mm to 1.0mm	1.1mm-2.1mm	1.1mm-2.1mm	2.75mm-4.25mm
Wire Type	Solid or Stranded	Solid or Stranded	Stranded	Stranded	Stranded
Insulator Material	Nylon 46; UL94VO	Nylon 46; UL94VO	Nylon 46; UL94VO	Nylon 46; UL94VO	Nylon 46; UL94VO
Contact Material	Phosphor Bronze	Phosphor Bronze	Phosphor Bronze	Phosphor Bronze	Phosphor Bronze
Plating	Gold / Tin over Nickel	Tin over Nickel	Tin over Nickel	Tin over Nickel	Tin over Nickel
Durability	10 Cycles	3 Cycles	3 Cycles	3 Cycles	3 Cycles
Environmental					
Operating Temperature	-40ºC to +125ºC	-40ºC to +125ºC	-40ºC to +125ºC	-40ºC to +125ºC	-40ºC to +125ºC
Extensions / Accessories					
Termination Tools	N	Y	Y	Y	Y
Termination Caps	N	N	Y	Y	N
Strain Relief Caps	Y	N	Y	Y	N
Top 3 Customer Benefits	Mates with standard BTB	Gas tight termination	Gas tight termination	Gas tight termination	Gast tight termination
	Locking latch	Automotive level tested	Automotive level tested	Low profile	Automotive level tested
	2p-6p availability	Positive strain relief	Positive strain relief	Low cost	Positive strain relief

	Board-to-Board (BTB)	
Application Overview	End-to-End PCB Stacking	
Series	**00-9159**	**10/20-9159**
Description	1pc Card Edge	2pc Plug / Socket
Color Options	Black or White	Black or White
Part Number	00 9159 00x 001 106	x0 9159 00x 101 116
Sizes	2p - 5p	2p - 6p
Application	1.6mm thick PCB	Top Side SMT
Electrical		
Current Rating	3 Amps / Contact	5 Amps / Contact
Voltage Rating	250 VAC	125 VAC
Mechanical		
Insulator Material	Nylon 46; UL94HB	Nylon 46; UL94VO
Contact Material	Phosphor Bronze	BeCu / Phos Bronze
Plating	Tin over Nickel	Gold / Tin over Nickel
Durability	5 Cycles	10 Cycles
Environmental		
Operating Temperature	-55ºC to + 125ºC	-40ºC to +125ºC
Extensions / Accessories		
Top Load Socket	N	Y
Locking Clip	N	Y
Shorting Socket	N	Y
Top 3 Customer Benefits	Low Cost / Tin Plated	Miniature size; X, Y & Z
	High contact force	Reparability
	Accepts standard PCB	Locking clip

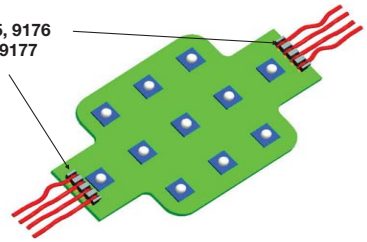
BTB Application View

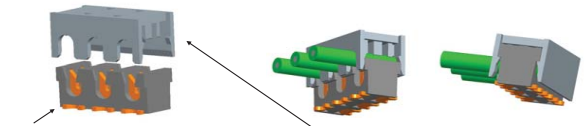


WTB Application View



Discrete Wire Termination is as simple as 1, 2, 3



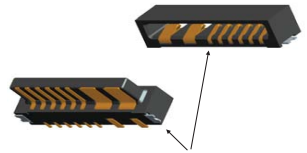


Termination/Locking Caps: High Vibration

9176 Discrete WTB: Low profile, low cost, same process, same reliability for 18 AWG-24AWG

Next Generation Potential Products

End Caps: System Solutions



Hybrid: Mixed Signal & Power