

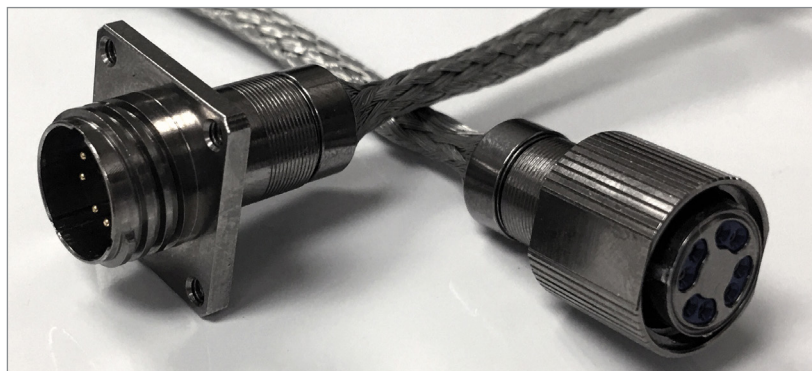
ULTRA HIGH-SPEED INTERCONNECT SOLUTION

CarlisleIT (Carlisle Interconnect Technologies) Octax®-Solo 10Gbps Ethernet connector is a single-port, standalone connector. The Octax connector:

- » Uses innovative inserts to isolate each twisted pair and contact.
- » Cable and twist is maintained extremely close to the contacts to minimize characteristic impedance mismatch.
- » Each insert serves as an isolated cell to virtually eliminate near-end crosstalk.
- » Capable of operating in data transmission speeds of 10 Gigabits/sec (Gbps) or higher.
- » Delivers 10 x the transmission speed (10Gbps signal), and 2 x the density compared to Quadrax type solutions.
- » The Octax standard M39029 crimp contacts reduce manufacturing installation time and provide a field repairable solution with ease.

FEATURES & BENEFITS

Feature	Customer Benefit
Gigabit and 10 Gb Ethernet data transfer speed	Allows for higher quantities of data to transfer at quicker speeds covering a variety of 1 Gb applications and emerging 10 Gb needs
Field repairable	Designed for easier and less costly on-site termination repair
Uses standard 22D crimp contacts (M39029)	Standard off-the-shelf contacts are readily available and requires no special tooling
Small form factor	Critical space savings for highly dense applications
Anti-decoupling/self-locking mechanism for rugged environments	Connector will not disconnect/uncouple in a high vibration application



Octax®-Solo. Learn more: <http://www.carlisleit.com/product/octax-solo>

SUGGESTED APPLICATIONS

- » Single-Port 10Gbps Ethernet connector (compatible with CarlisleIT Gigabit series Ethernet cables)
- » Aerospace and military
 - » Avionics
 - » IFEC
 - » High Definition Video Displays
 - » Data Loading
- » Any high-speed Ethernet application

Part Number	Description
OCTAX-SOLO-FM-PCB*	Straight PCB, flange mount
OCTAX-SOLO-FMR*	Flange mount receptacle connector
OCTAX-SOLO-P	Plug connector

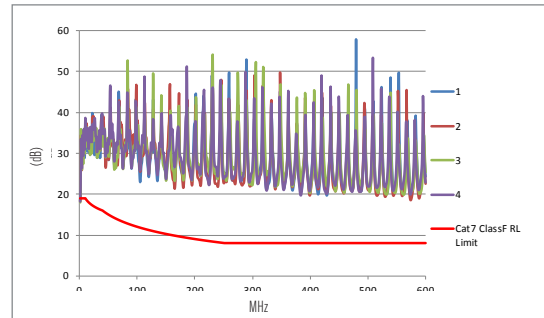
*In-line and jam nut designs also available

Specifications & Performance

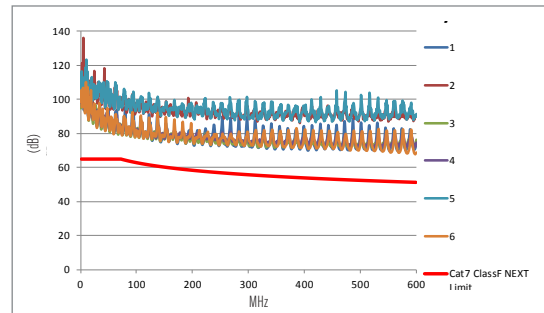
Octax®-Solo

Test Scope	Per Specification	Notes
Environmental		
Operating Temperature Range	-65°C to 175°C	
Altitude Immersion	EIA-364-03	70,000 ft., 500 VRMS
Fungus	MIL-STD-810	By Similarity
Contamination by Fluids	MIL-STD-810	By Similarity
Sand and Dust	MIL-STD-810	By Similarity
Corrosion Resistance	EIA-364-26, Condition A	100 hrs
Mechanical		
Vibration - Random	EIA-364-28, Condition V, Letter "J"	
Durability	MIL-DTL-38999	500 Mate/Unmate Cycles
Mating Cycles	EIA-364-28, Condition V, Letter "J"	
Coupling Torque	EIA-364-8310 mV drop	
Contact Retaining Force	EIA-364-29, Method B6 lbs max, .012" Displacement	
Electrical		
Dielectric Withstand Voltage	EIA-364-20	500VRMS, 60Hz
Data Rate	10Gbps	
Insertion Loss	< 0.3 dB up to 5 GHz	
Return Loss	> 20 dB up 5 GHz	
NEXT and FEXT	> 40 dB up 5 GHz	
Differential to Common Mode Conversion	> 50 dB up 5 GHz	

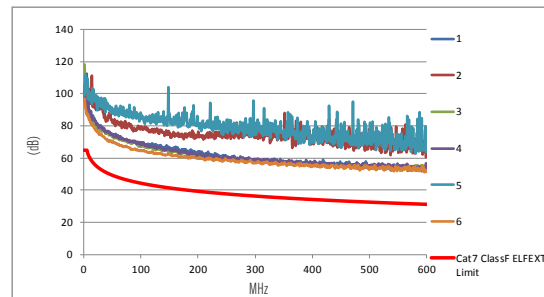
Carlisle '1E027X-8' Octax Assembly Return Loss



Carlisle '1E027X-8' Octax Assembly NEXT

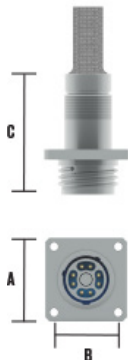


Carlisle '1E027X-8' Octax Assembly ELFEXT



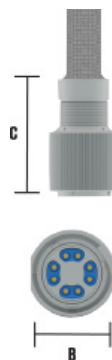
OCTAX-SOLO-FMR

- » A: 0.70"
- » B: 0.55"
- » C: 0.947"
- » 4.5 grams (ref)



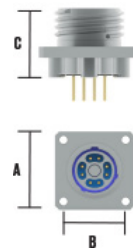
OCTAX-SOLO-P

- » A: N/A
- » B: 0.51" dia.
- » C: 0.879"
- » 5 grams (ref)



OCTAX-SOLO-FM-PCB

- » A: 0.70"
- » B: 0.55"
- » C: 0.49"
- » 3 grams (ref)



Check out other related products

- » **Octax® 38999** <http://www.carlisleit.com/product/octax-38999-style-circular-solutions>
- » **Octax® Concept Connector Options** <http://www.carlisleit.com/product/octax-concept-connector-options>
- » **Gigabit Ethernet Series**
<http://www.carlisleit.com/products/wire-cable/high-speed-digital-or-data-cable/gigabit-ethernet-series>
Note, All of the Gigabit cables are compatible except the Shielded Dual Quads

Connect with us today!

www.CarlisleIT.com

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