

Octonet Contact: The Superior Ethernet Contact System for MIL-DTL-38999, Series III



Pin for 24 awg



Socket for 24 awg



Pin PCB Tail



Socket PCB Tail

OVERVIEW

Eight strategically spaced inner contacts form four 100 Ohm matched impedance differential pairs.

FEATURES

- + Available in size 8 crimp termination style
- + Also available in PC Tails
- + Can be installed in existing size 8 Quadrx cavities
- + Meets performance specifications of CAT-6A cable
- + 10G Ethernet compliant
- + Overall higher bandwidth than standard CAT5E Quadrx-supports up to 4.0 Gbps per pair
- + Enhanced crosstalk performance (compared to standard Quadrx)
- + Supports wire ranges 26 to 24 gauge
- + Requires modification of MIL-DTL-38999 connector to accommodate keyed contacts

BENEFITS

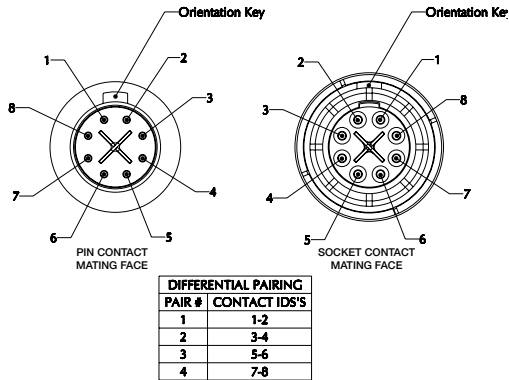
- + Easy drop-in replacement to installed connectors no need to redesign
- + Self removing contact feature - no extra contact extraction tool needed (24 Gauge only)

Contact Style	Part Number	*Cable	AWG
Crimp Pin	21-032904-001	Thermax: MX10G-24HP	24
Crimp Socket	21-032905-001	Thermax: MX10G-24HP	
Crimp Pin	21-032904-011	W.L.Gore: RCN8966-24	
Crimp Socket	21-032905-011	W.L.Gore: RCN8966-24	
Crimp Pin	21-032904-021	PIC E6A3824	
Crimp Socket	21-032905-021	PIC E6A3824	
PCB Pin	21-032906-001		
PCB Socket	21-032907-001		

*Not limited to cables shown

SPECS

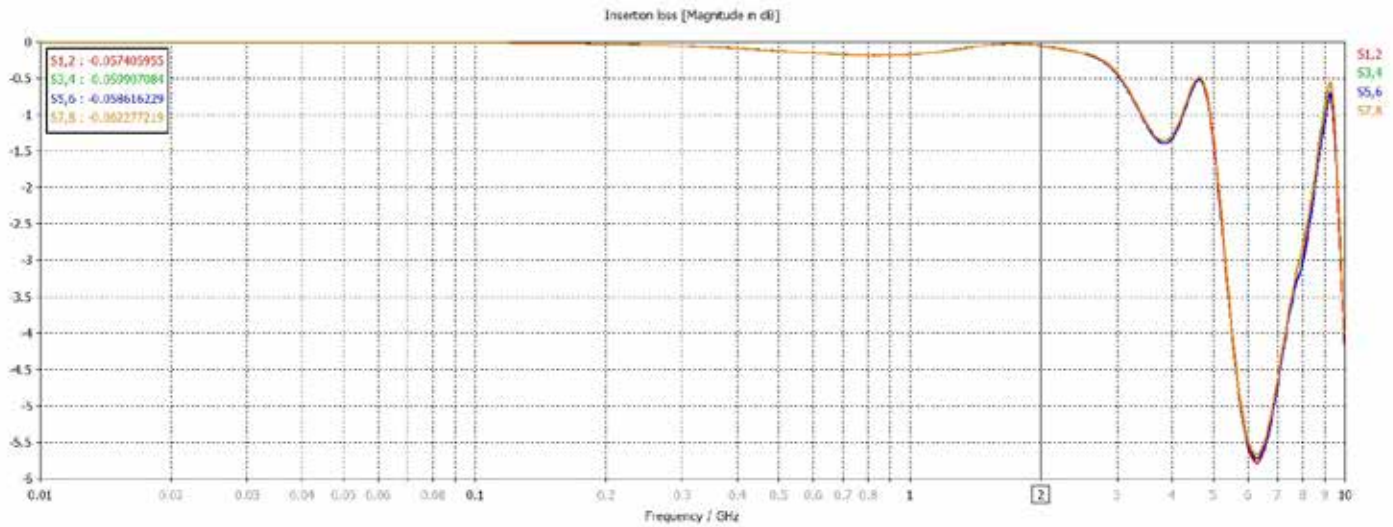
Environmental Sealing:	IAW connector specification
Corrosion Resistance:	500 hours salt spray
EMI Shielding:	360 degree shielding on each pair
Mating Cycles:	500 cycles
Voltage Rating:	500 Vrms max @ sea level
Dielectric Withstanding Voltage:	500 VAC RMS sea level



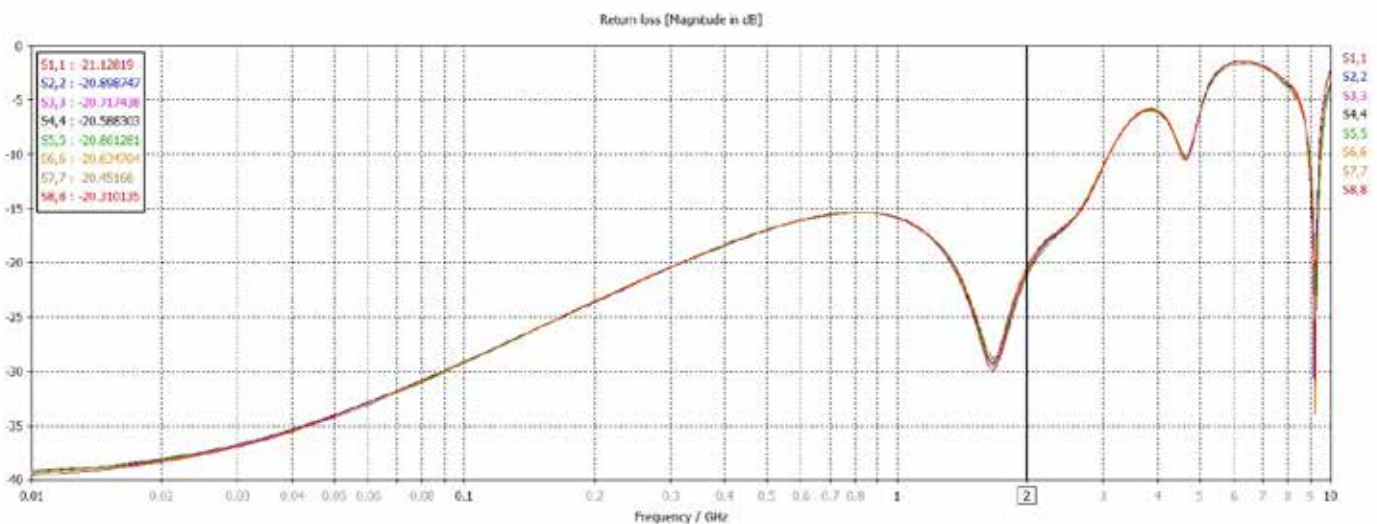


DS-260

Contact Differential Insertion Loss

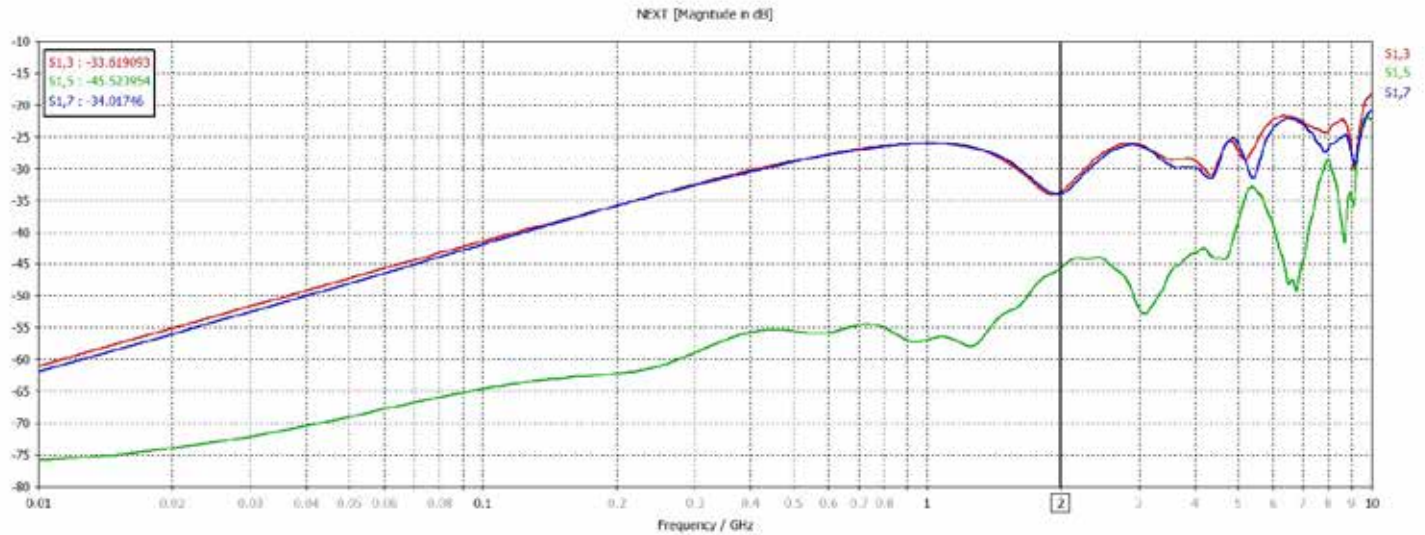


Contact Differential Return Loss

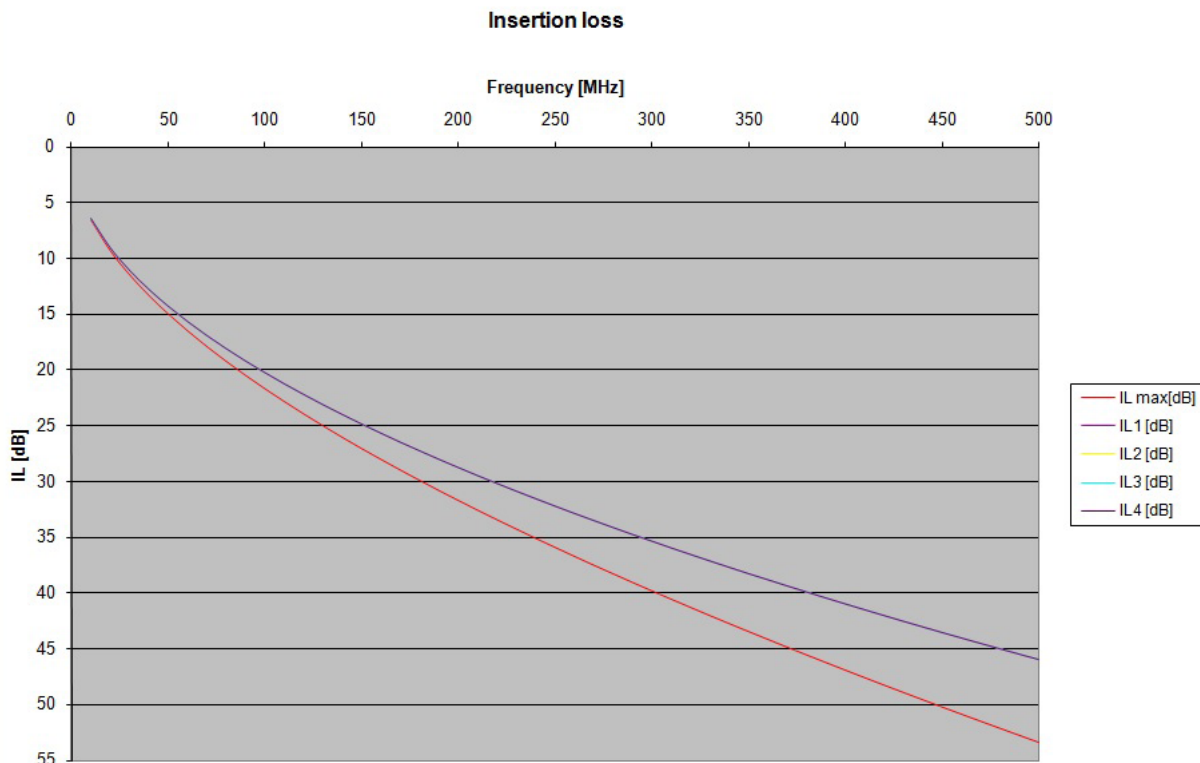




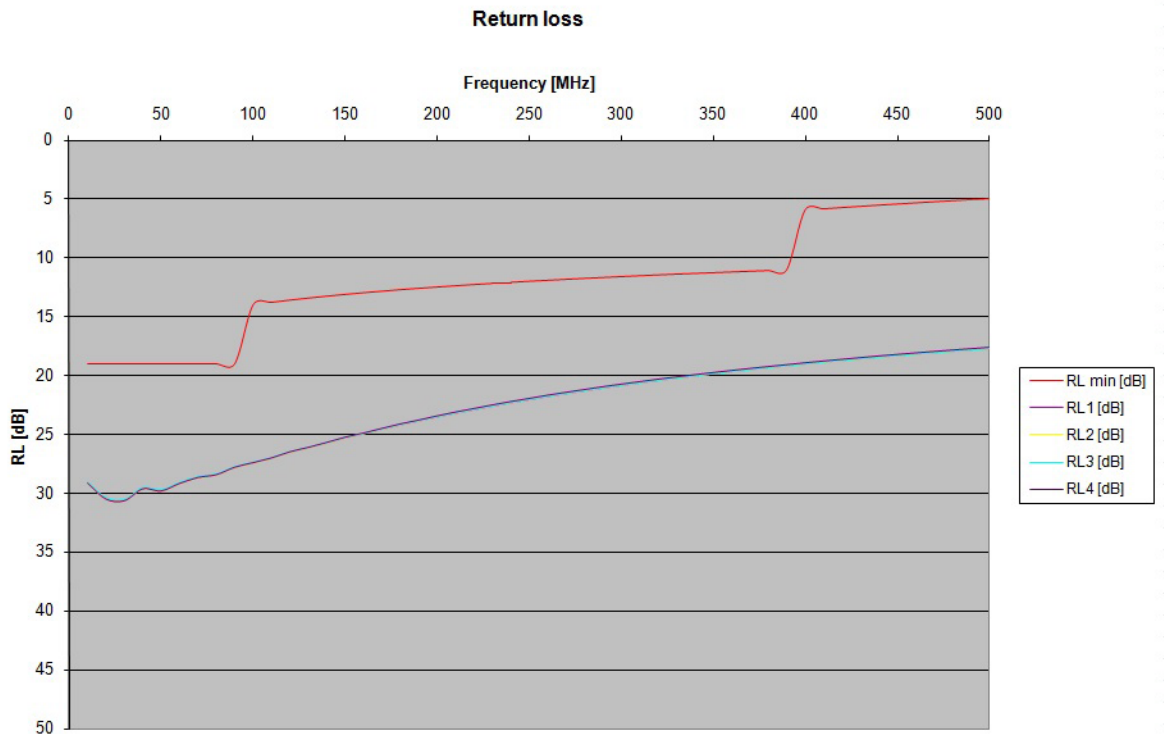
Contact Differential Rear-end Crosstalk



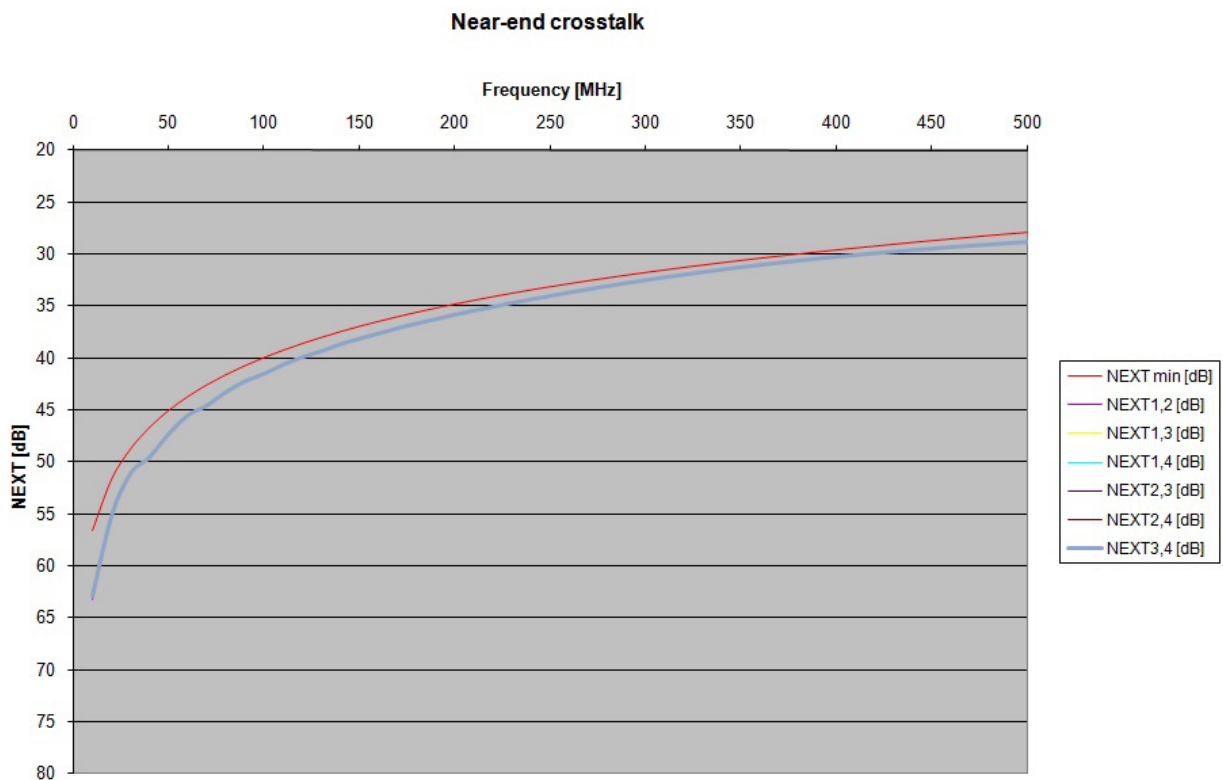
10GBASE-T data (two mated contacts on each end of 100 meter CAT6a cable)



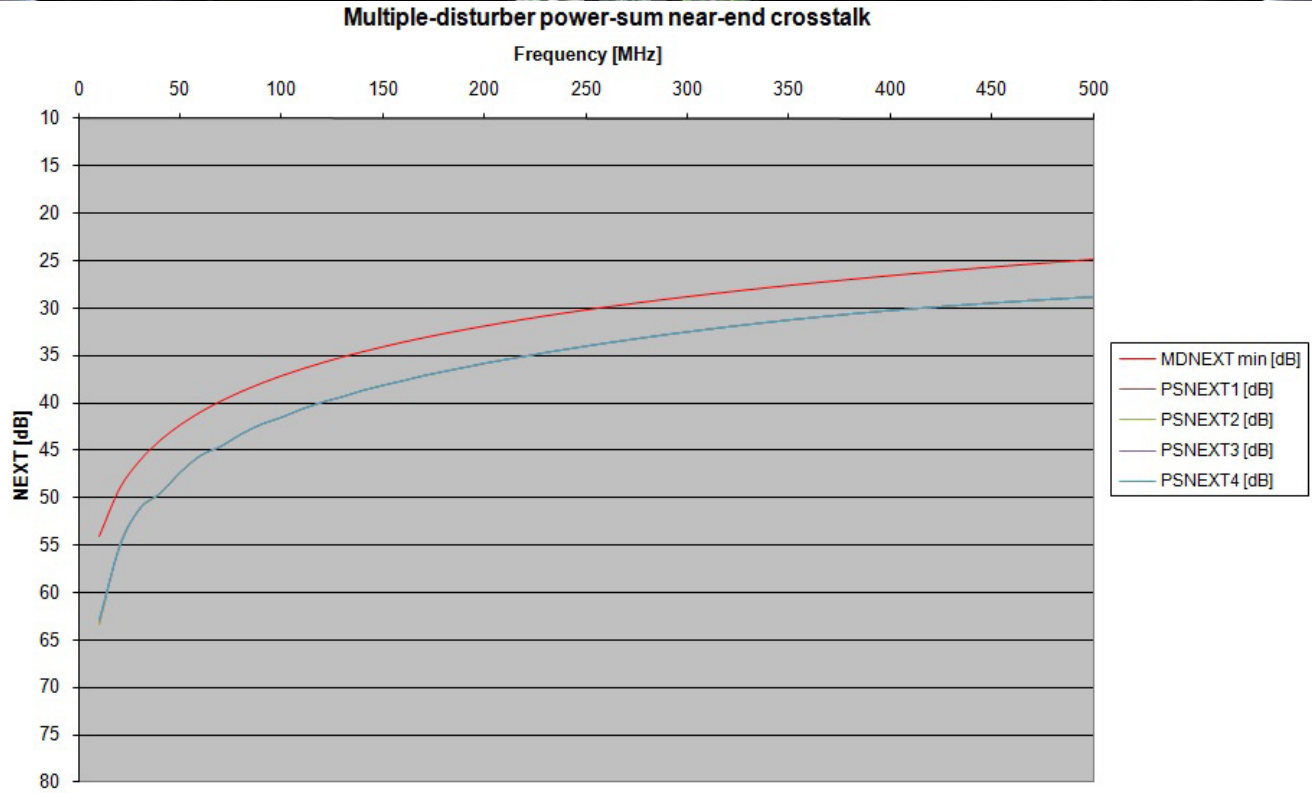
Cable assembly near-end crosstalk



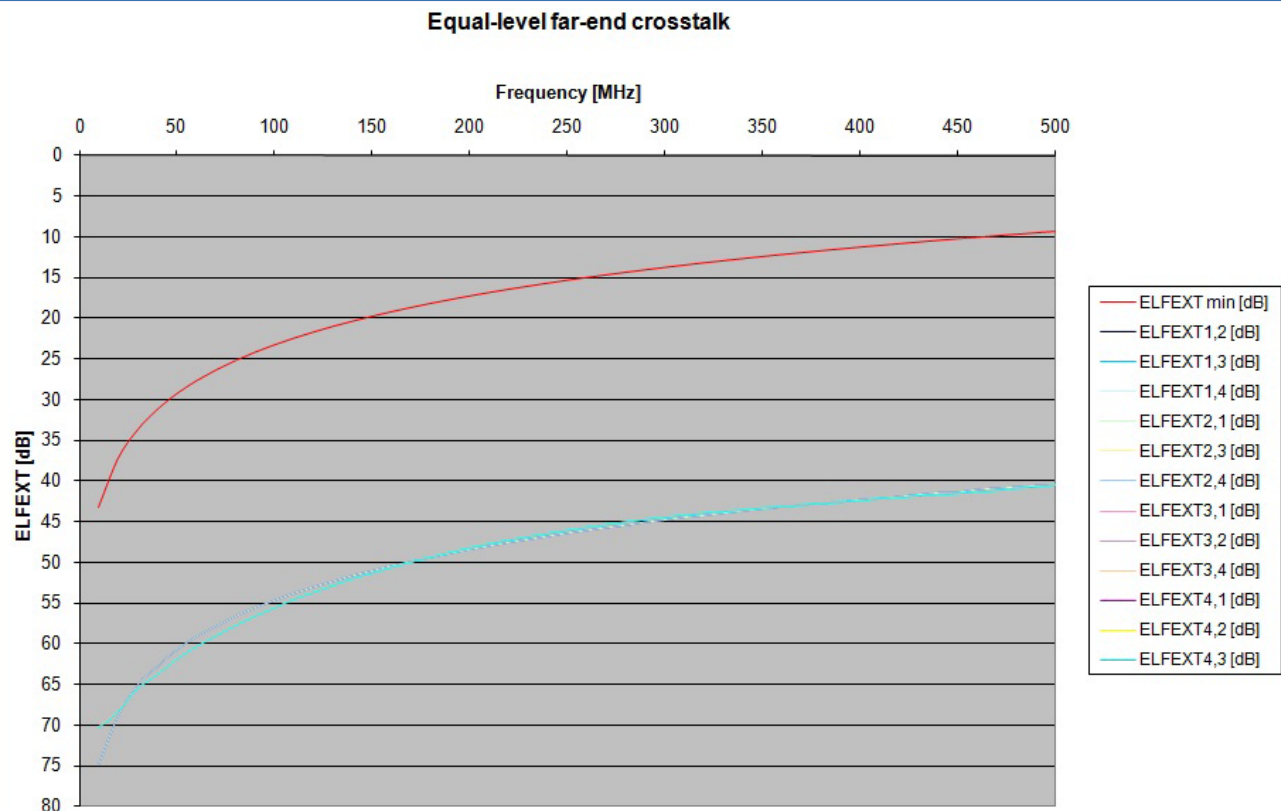
Cable assembly return loss



Cable assembly near-end crosstalk



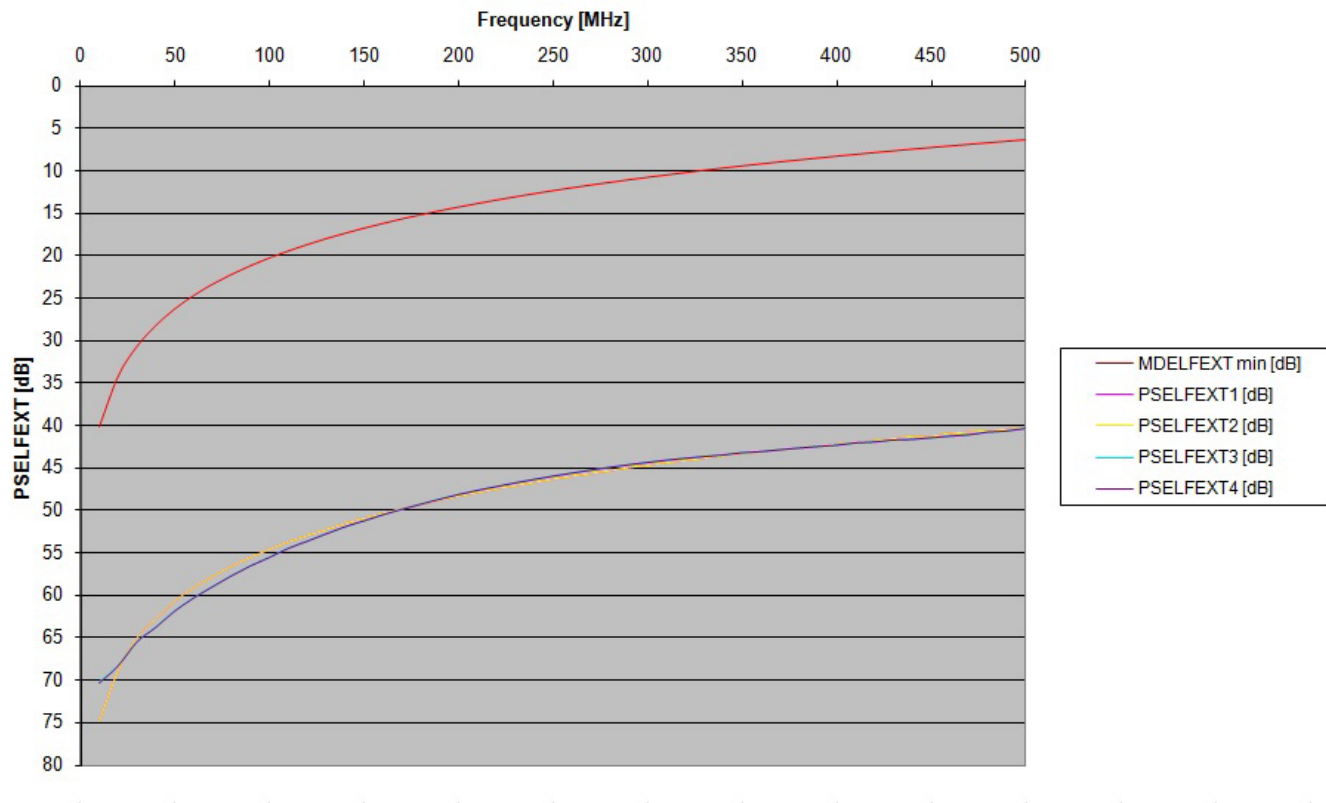
Cable assembly multiple disturber power-sum near-end crosstalk



Cable assembly equal-level far-end crosstalk



Multiple disturber power-sum equal-level far-end crosstalk



Cable assembly multiple disturber power-sum equal-level far-end crosstalk

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