
802.3CG T1S MULTIDROP TERMINATIONS

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802.CG



802.3cg Short-Reach PHY

Multidrop Terminations

■ Draft 1.0:

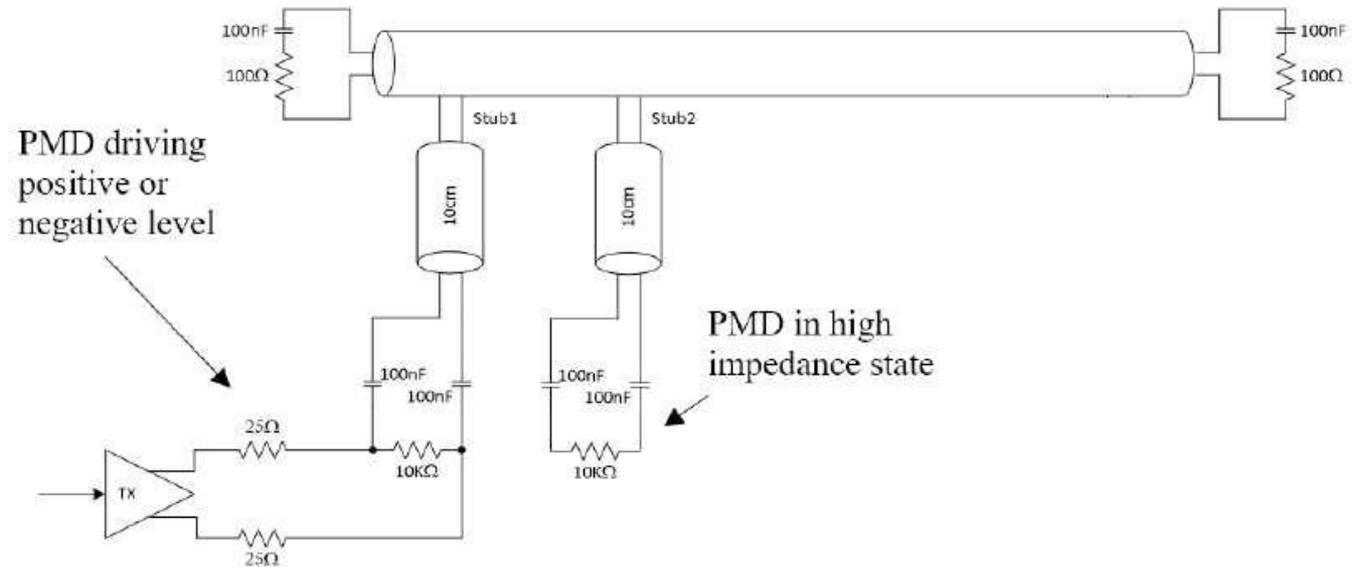


Figure 147-10—Multidrop line termination and PMD

■ Problems:

- End node terminations can be required to be active nodes (T1S PHYs) in Automotive application
- Stub transceiver termination does not need to be specified for system to work, but (the current) specification precludes certain implementations

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Multidrop Terminations

Proposal for Subclause 147.5.1.2 („PMD Specifications for multidrop mixing segment“)

- „If PHY is configured as a head node, the PMD shall provide 100Ohm +- 30% resistive termination.“
- „If PHY is configured as a stub node and is not transmitting, PMD shall go into high impedance state.“
(value as per comment on Draft 1.0 „10kOhm or larger from 0 to 25MHz“)
- Advantages of this specification:
 - all cases work through configuration
 - Multidrop with active end nodes
 - Multidrop with passive end nodes
 - point-2-point can also be configured
 - certain stub transmitter implementations are not precluded