Failure Mechanism of Passive Optical Devices

Overview

The critical dependency lies in how passive optical components age through cumulative physical and material processes rather than discrete failure events. Table 2 summarizes some typical failure modes. Failures of electronic devices, in general, can be catastrophic or noncatastrophic. Catastrophic failures render the device totally nonfunctional, while noncatastrophic failures result in an electrically operating device that shows parametric degradation and limited performance. In addition, several kinds of software have to be utilized to assist with computation in the method. A general classification of the main degradation mechanisms, per class of component, is reported illustrating the. Precise Failure Location and Protection Mechanism in Long-Reach Passive Optical Network In this paper, optical code domain reflectometer (OCDR) and optical time domain reflectometer (OTDR) are used for centralized monitoring and troubleshooting any fault occurring in the network.

Article Content

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This chapter provides a description of some of the more common failure modes and mechanisms affecting GaAs-based MMICs. The current understanding of the topic will be presented along with a …

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