PCN: V08-050-E47540-MA

Product Change Notice

Issued Date: 18 November 2008

Change Type:
Major.

Parts Affected:
Miniature Link 820 nm Fiber Optic Transmitters with ST, SMA and SC Ports

HFBR-1402Z	HFBR-1415TZ	QFBR-1237Z
HFBR-1404Z	HFBR-1415Z	QFBR-1239Z
HFBR-1412MTZ	HFBR-1424Z	QFBR-1240Z
HFBR-1412TMZ	HFBR-1454Z	QFBR-1254Z
HFBR-1412TZ	QFBR-5499	QFBR-1407Z
HFBR-1412Z	QFBR-5498	QFBR-1430Z
HFBR-1412Z-MT	HFBR-T409TZ	QFBR-1445Z
HFBR-1414MZ	QFBR-1232Z	QFBR-1478CZ
HFBR-1414TKZ	QFBR-1233Z	QFBR-T459Z
HFBR-1414TZ	QFBR-1234Z	QFBR-T461Z
HFBR-1414Z	QFBR-1236Z	QFBR-T462Z

Description and Extent of Change:

1. Introduction of Avago's new Enhanced ESD Capable 820 nm LED for Transmitters.
2. The LED size is reduced from 21mils x 11 mils to 17 mils x 11 mils by reducing the distance between the bond pad and the emission area.
3. HBM ESD Threshold will be revised to 2000V in Datasheet specifications.

Reasons for Change:

1. The new LED will provide a higher HBM ESD Threshold of 2000V minimum.
2. Implementing LED manufacturing improvements in order to increase die count per wafer, thus increasing LED capacity.

Effect of Change on Fit, Form, Function, Quality, or Reliability:

No changes on Module Fit/Form/Function. The appropriate electrical and optical characterization and reliability qualification will be performed on representative products to ensure consistent electrical and optical performance, as well as reliability, prior to the effective date of change.

Effective Date of Change:

Target effective date for this implementation will be on or after 1st April 2009. Timing for shipment of the changed part may vary by part number depending on qualification completion and customer demand.

Recommended Action to be Taken by Customer:

1) Sample requests must specify the PCN # stated above and shall be placed by your Avago Technologies Field Sales Representative through the Avago Technologies FOMFGS ordering system.
2) Consider qualifying samples in representative product(s).
3) Please return any response as soon as possible, but not to exceed 30 days.

Qualification Data:

A qualification plan is tabulated below to address the reliability performance of the LED under full module stress conditions. HFBR-1414Z is used as the Qualification Vehicle.

Test	Reference	Condition	Sample Size	Test Points	Result
High Temp Operating Life (HTOL)	Section 5.18 (GR-468-CORE)	Ta = 85°C, If = 100mA	135pcs	168hrs, 500hrs, 1000hrs, 2000hrs	0/135
Temperature Cycle (TMCL)	MIL-STD-883 Method 1010	Ta = -40°C to +100°C	33 pcs	200cyc, 500cyc, and 1000cyc	0/33

Test	Reference	Sample Size	Test Point	Result
HBM ESD	MIL-STD-883 Method 3015	18 pcs	Post 2000V	0/18

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies' procedure: Change Control and Customer Notification, A-5962-6052-80.

Please contact your Avago Technologies field sales engineer or Contact Center (http://www.avagotech.com/contact/) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.