

PRODUCTS SPECIFICATION

DESCRIPTION : IDB-1394POF Transceiver Module
CUSTOMER :
COMOSS P/N :
Date of Issue : Dec/12/2003
Version : 1.0
Designer : Miles

Approval



Customer Signature



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Subject: Product Specification – IDB-1394 POF Transceiver Module

1.0 General

This specification describes the optical, mechanical and environmental characteristics of IDB-1394 POF Transceiver Module. All performance are designed for complying with 1394 Automotive Specification (IDB-1394) Draft 1.0.

2.0 Series Description

IDBDX series:

Please review the detail order information at COMOSS website.

3.0 Application

(1) Performance: S200

(2) Ambient Temperature Range: -40 to +65 °C

4.0 Overall Dimensions

See attachment

5.0 Mating half:

IDBPP series:

Performance Group A

Item	Description	Testing Method and condition	Characteristic and Measuring Method	Requirements
A1	None		Output Power IEC61280-1-1 (98)	FOT Only: Initial baseline measurement -7.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Initial baseline measurement -22dBm MAX.
A2	Thermal Age	ISO8092-2 (00) Par 4.18 (85°C) Energized; Collect data at a. 100h b. 200h c. 500h d. 1008h	Output Power IEC61280-1-1	FOT Only: Maximum change of ±1.0dB from initial baseline measurement and -8.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ±0.5dB from initial baseline measurement and -21.5dBm MAX.

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Performance Group B

Item	Description	Testing Method and condition	Characteristic and Measuring Method	Requirements
B1	None		Output Power IEC61280-1-1	FOT Only: Initial baseline measurement -7.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Initial baseline measurement -22dBm MAX.
B2	Stepped Temperature	ISO 16750-1 Par. 5.2 Class 65 only: Temperature: +25°C to -40°C to +65°C @ 5°C	Output Power IEC61280-1-1	FOT Only: Maximum change of ±1.0dB from initial baseline measurement and -8.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ±0.5dB from initial baseline measurement and -21.5dBm MAX.
B3	Thermal Shock	ISO 8092-2 (00) Par 4.23 Class 65 only: 100 Cycles (-40°C to +85°C);	None	
B4	None		Output Power IEC61280-1-1	FOT Only: Maximum change of ±1.0dB from initial baseline measurement and -8.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ±0.5dB from initial baseline measurement and -21.5dBm MAX.

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Performance Group C

Item	Description	Testing Method and condition	Characteristic and Measuring Method	Requirements
C1	None		Output Power IEC61280-1-1	FOT Only: Initial baseline measurement -7.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Initial baseline measurement -22dBm MAX.
C2	Mechanical Shock	ISO 8092-2 (00) Par 4.19 [100 g's with 5ms duration] 1000 shocks in both directions of three mutually perpendicular axis; mated; energized)	None	
C3	None		Output Power IEC61280-1-1	FOT Only: Maximum change of ±1.0dB from initial baseline measurement and -8.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ±0.5dB from initial baseline measurement and -21.5dBm MAX.
C4	Vibration	ISO 8092-2 (00) Par 4.11 Class B [10 - 81Hz with ±0.75 displacement; 81 to 500Hz at 20 g's and 500 to 2000Hz at 18 g's] 8h in each mutually perpendicular axis Mated; Energized	None	

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Item	Description	Testing Method and condition	Characteristic and Measuring Method	Requirements	
C5	None		Output Power IEC61280-1-1	FOT Only: Maximum change of ± 1.0 dB from initial baseline measurement and -8.5 dBm MIN.	
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ± 0.5 dB from initial baseline measurement and -21.5 dBm MAX.	
C6	Impact (Drop)	ISO 8092-2 (00) Par 4.20 8 drops from: a. 1.2m b. 2.4m (non-energized)	None		
C7	None		Output Power IEC61280-1-1	FOT Only: Maximum change of ± 1.0 dB from initial baseline measurement and -8.5 dBm MIN.	
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ± 0.5 dB from initial baseline measurement and -21.5 dBm MAX.	

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Performance Group D

Item	Description	Testing Method and condition	Characteristic and Measuring Method	Requirements
D1	None		Output Power IEC61280-1-1	FOT Only: Initial baseline measurement -7.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Initial baseline measurement -22dBm MAX.
D2	Humidity (cyclic)	ISO 8092-2 Par.4.10 Class 65: 10 cycles (240 h) (+25°C and 45-75 % RH to +85°C and 95% RH to -40°C and RH uncontrolled; energized)	None	
D3	None		Output Power IEC61280-1-1	FOT Only: Maximum change of ±1.0dB from initial baseline measurement and -8.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ±0.5dB from initial baseline measurement and -21.5dBm MAX.

Performance Group E

Item	Description	Testing Method and condition	Characteristic and Measuring Method	Requirements
E1	None		Output Power IEC61280-1-1	FOT Only: Initial baseline measurement -7.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Initial baseline measurement -22dBm MAX.
E2	Thermal Aging	ISO 8092-2 (00) Par. 4.18 Class 65 only: Temperature: +25°C to -40°C to +65°C	None	
E3	None		Output Power IEC61280-1-1	FOT Only: Maximum change of ±1.0dB from initial baseline measurement and -8.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ±0.5dB from initial baseline measurement and -21.5dBm MAX.
E4	Vibration	ISO 8092-2 (00) Par 4.11 Class B [10 - 81Hz with ±0.75 displacement; 81 to 500Hz at 20 g's and 500 to 2000Hz at 18 g's] 8h in each mutually perpendicular axis Mated; Energized	None	
E5	None		Output Power IEC61280-1-1	FOT Only: Maximum change of ±1.0dB from initial baseline measurement and -8.5dBm MIN.
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ±0.5dB from initial baseline measurement and -21.5dBm MAX.

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Item	Description	Testing Method and condition	Characteristic and Measuring Method	Requirements	
E6	Thermal Shock	ISO 8092-2 (00) Par 4.22 Class 65 only: 100 Cycles (-40°C to +85°C);	None		
E7	None		Output Power IEC61280-1-1	FOT Only: Maximum change of ±1.0dB from initial baseline measurement and –8.5dBm MIN.	
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ±0.5dB from initial baseline measurement and -21.5dBm MAX.	
E8	Humidity (cyclic)	ISO 8092-2 Par.4.10 10 cycles (240 h) (+25°C and 45-75 % RH to +65°C and 95% RH to -40°C and RH uncontrolled; non-energized)	None		
E9	None		Output Power IEC61280-1-1	FOT Only: Maximum change of ±1.0dB from initial baseline measurement and –8.5dBm MIN.	
			Responsivity or Sensitivity IEC61280-2-4	FOT Only: Maximum change of ±0.5dB from initial baseline measurement and -21.5dBm MAX.	