

## MTBF Report

Optical Transceiver FIT Rate based on Field Return Data			
List part number(s) used to derive FIT estimate	Part Number	Total operating-hours	Units
1.25Gb/s 1310nm/1490nm Single-mode SFP Transceiver	BO15C3149620D	30,922,560	Hours
1.25Gb/s 1490nm/1310nm Single-mode SFP Transceiver	BO15C4931620D		
Total accumulated field device operating-hours		30,922,560	Hours
Units shipped		7,158	Units
Total number of failures reported		16	Units
Confidence factor for 90% CL (g90)		1.40	
Operating case temperature assumed for field population		55	°C
Demonstrated FIT rate calculated at 90% confidence level		726	FITs
Activation energy assumed for field failures		0.35	eV
Demonstrated FIT rate converted to 55°C case temperature		726	FITs
MTBF at 55°C case temperature		1,377,300	Hours
Maximum specified operating case temperature		85	°C
Demonstrated FIT rate converted to maximum specified operating case temperature		1,247	FITs
DPPM		2.24E-03	
<b>Notes:</b> 1.Total shipment of above PNs amounts to 7158pcs in recent 2 year, including the commercial units. 2.Include only failures attributed to the transceiver when used within specified operation limits. 3.This is calculated automatically using the method given in Section 5.19.3 of GR-468-CORE. 4.A value of 0.35 eV is generally accepted for non-wear-out failures in hybrid optoelectronic components. 5.Temperature conversion factor is based on the activation energy and the well-known Arrhenius relationship. 6.The case operating temperature: -40~85°C(Industrial); 0~70°C(Commercial).			