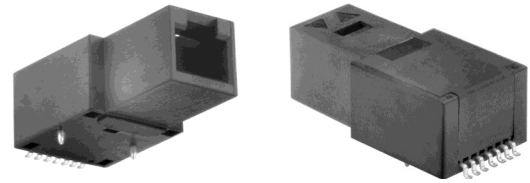


OPF5020 Reliability Data

Application Bulletin 219



10/100Mbps SFF Transceiver with MT-RJ Connector



Description

The Optek Quality Assurance System provides a means to monitor, control and correct product quality on a real-time basis. Each product family that Optek produces is extensively tested prior to manufacturing release for quality and reliability. An ongoing commitment to quality and product improvement insures that reliability will continue to progress throughout the product's life cycle.

OPF5020 transceivers are designed to provide the high a degree of performance with equal level of reliability. The data contained in this report serves to validate the reliability of these components and stands as Optek's commitment to continuous product improvement.

OPF5020 Demonstrated Performance

Test Name	Conditions	Total Units Tested	Total Device Hours	Failures
High Temperature Operating Life	$T_A = 70\text{ }^\circ\text{C}$, $I_F = 60\text{mA}$ $V_{F(AVG)} = 1.397\text{ V}$	50	250,000	0

Predicted Failure Rate at $I_F = 60\text{ mA}$ (typical)

Ambient Temp. ($^\circ\text{C}$)	Junction Temp. ($^\circ\text{C}$)	Typical Performance		Predicted Performance 60% Confidence		Predicted Performance 90% Confidence	
		MTTF ¹ (Hours)	FIT ² (10^9 Hours)	MTTF (Hours)	FIT (10^9 Hours)	MTTF (Hours)	FIT (10^9 Hours)
70	96	260,000	3,846	282,609	3,538	112,798	8,865
60	86	365,162	2,739	369,915	2,519	158,422	6,312
50	76	521,893	1,916	567,275	1,763	226,418	4,417
40	66	924,217	1,082	1,004,583	995	400,962	2,494
30	56	1,388,666	720	1,509,420	663	602,458	1,660
20	46	1,716,736	583	1,866,017	536	744,788	1,343

Notes:

1. MTTF is mean time to failure in hours.
2. FIT is the number of failures per billion device-hours.

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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