

## DATA SHEET

# SFP+ 10GBASE-SR/SW, 850NM MMF TRANSCEIVER EXTENDED TEMPERATURE

## DESCRIPTION

This transceiver is hot pluggable duplex-LC optical transceiver designed for using in 10Gbps serial applications such as SONET OC192/SDH STM64, 10Gigabit Ethernet and 10Gbps Fiber Channel applications. It operates with single +3.3V power supplies. The transceiver conforms to the 10Gbps SFP+ multi-source agreement (MSA).

This transceiver consists of optical subassemblies (OSA) for both transmitter and the receiver, and an electrical subassembly, which is packaged together in a metal enclosure. The TOSA is a high-performance 850nm VCSEL, and the ROSA is high speed PIN detector with a built-in preamplifier.



## KEY FEATURES

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Built-in digital diagnostic functions

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850nm VCSEL and PIN receiver

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LVTTTL (open collector) digital diagnostic monitoring signals

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Compliant with specifications for IEEE-802.3ae 10Gigabit Ethernet at 10.3Gbps and 10G Fiber Channel at 10.52Gbps

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Conforms to 10Gbps SFP+ Multi-Source Agreement

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Class 1 Laser Safety Conformance

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Compatible with industry standard SFP electrical connector & cage

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Industry standard duplex LC optical connector

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Operates with 50/125  $\mu$ m multi-mode optical fibers

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Case temperature range : -40°C to 85°C

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## APPLICATIONS

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SDH STM-64/SONET OC192 at 9.953Gbps

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10G Ethernet at 10.3125Gbps

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10G Fiber channel at 10.5187Gbps

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OC192 over FEC at 10.709Gbps

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## COMPLIANCES

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Compliant with SFF-8472 SFP+ MSA.

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Compliant to SFP+ SFF-8431 and SFF-8432.

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RoHS Compliant6

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### ENVIRONMENTAL SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Unit
Operation Temperature	-40		+85	°C
Storage Temperature	-40	-----	+85	°C
Operation Humidity*	5	-----	85	%
Storage Humidity	5	-----	85	%

(\*) not condensing

### OPERATING SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Unit
Supply Voltage	3.1	+3.3	+3.5	V
Power Dissipation		2.4		W
Transmission Distance			300/500	m

### OPTICAL SPECIFICATIONS

#### TRANSMITTER

Parameter	Min.	Typ.	Max.	Unit
Input Wavelength	830		870	nm
Average Launch Power	-6		-1	dBm
Extinction Ratio (ER)	3.5			dB
Optical Modulation Amplitude	-5			dBm
Optical Channel Penalty			1	dB
Spectrum			1	nm

#### RECEIVER

Parameter	Min.	Typ.	Max.	Unit
Input Wavelength	830		870	nm
Receiver Sensitivity		-15	-14	dBm
Input Saturation Power (Overload)	0.			dB
LOSA	-25			dBm
Hysteresis	1		4	dB



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## ORDERING INFORMATION

Jabil Part Number	Package	Rate	Reach	Other info
JPSP10S3LCE000L85	SFP+	10G	200/500m	DDM/RoHS - Extended Temperature

## CONTACT INFORMATION

**For additional information and evaluation samples order, please contact:**

**Chuck Sinha, Sr. Director of Sales**

Jabil Photonics

5960 Inglewood Dr. Suite 100, Pleasanton, CA

Mobile: 408-505-0955 Email: [Chuck\\_Sinha@Jabil.com](mailto:Chuck_Sinha@Jabil.com)