

SFP25G-A0C

25GBASE, SFP28 ACTIVE OPTICAL CABLE

Features

- Transmission data rate up to 25.78Gbps
- 850nm VCSEL laser
- PIN photo-detector
- Internal CDR on both transmitter and receiver channels
- Low power consumption < 1W
- Hot-pluggable SFP28 form factor
- Up to 70m on OM3 MMF and 100m on OM4 MMF
- Digital diagnostics functions are available (optional)
- Operating case temperature range: 0°C to +70°C



- 3.3V power supply voltage
- RoHS-6 compliant

Applications

- IEEE 802.3by 25GBASE-SR

1. Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage	Vcc	0	3.6	V
Storage Temperature	Ts	-40	+85	°C
Operating Humidity	-	5	85	%

2. Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Operating Case Temperature (Commercial)	Tc	0		+70	°C
Power Supply Voltage	Vcc	3.13	3.3	3.47	V
Power Supply Current	Icc			300	mA
Fiber Length on 50/125µm high-bandwidth (OM3) MMF				70	m
Fiber Length on 50/125µm high-bandwidth (OM4) MMF				100	m

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3. Optical and Electrical Characteristics

Parameter		Symbol	Min	Typical	Max	Unit
Transmitter						
Data rate		BR		25.78		Gbps
Centre Wavelength		λ_c	840	850	860	nm
Spectral Width (-20dB)		σ			0.6	nm
Average Output Power		Pavg	-8.4		2.4	dBm
Optical Power OMA		POMA	-6.4		3	dBm
Extinction Ratio		ER	2			dB
Differential data input swing		VIN,PP	40		1000	mV
Input Differential Impedance		ZIN	90	100	110	Ω
TX Disable	Disable		2.0		Vcc	V
	Enable		0		0.8	V
TX Fault	Fault		2.0		Vcc	V
	Normal		0		0.8	V
Receiver						
Data rate		BR		25.78		Gbps
Centre Wavelength		λ_c	840	850	860	nm
Receiver Sensitivity (OMA)		Psens	-	-	-10	dBm
Stressed Sensitivity (OMA)			-	-	-5.2	dBm
Receiver Power (OMA)					3	dBm
LOS De-Assert		LOSD			-13	dBm
LOS Assert		LOSA	-30			dBm
LOS Hysteresis			0.5			dB
Differential data output swing		Vout,PP	300		850	mV
LOS	High		2.0		Vcc	V
	Low				0.8	V

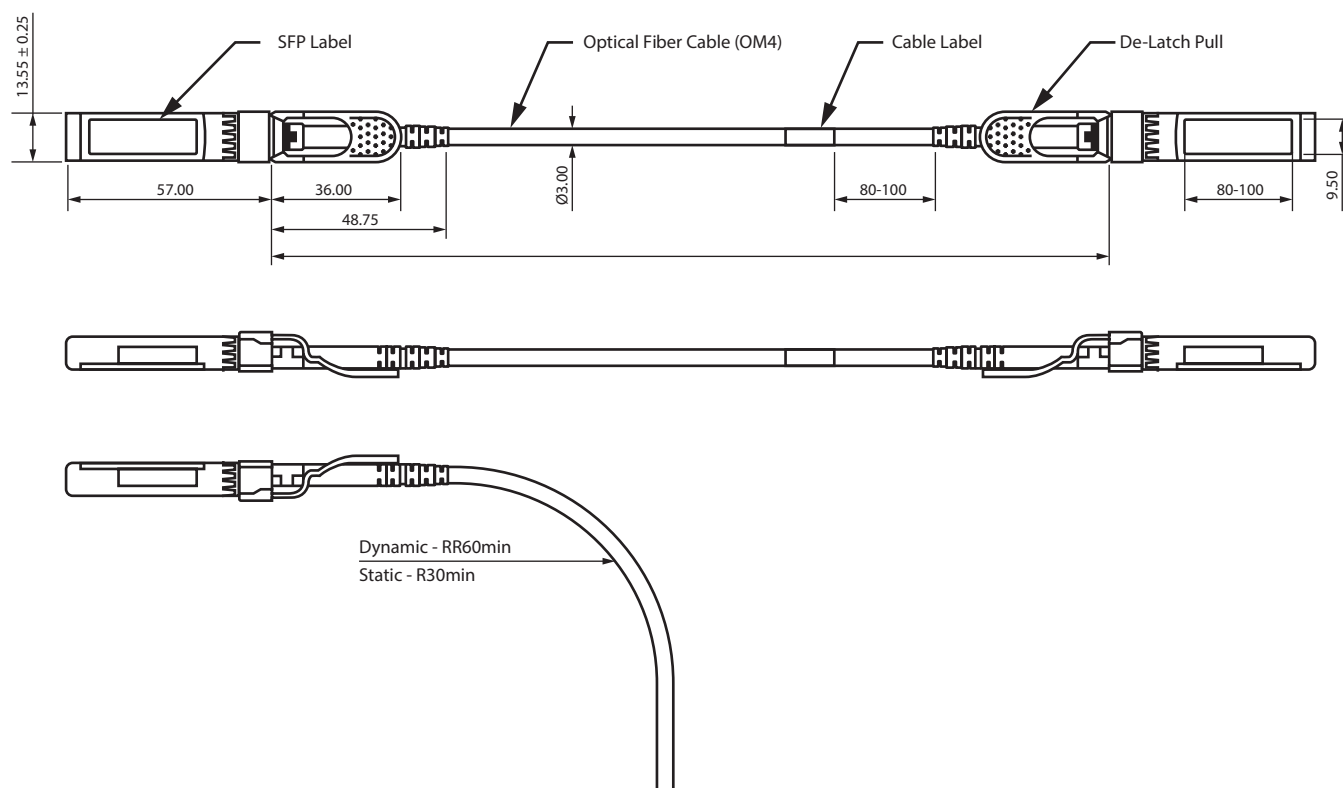
Note:

Receive Sensitivity measured with a prbs31 pattern @25.78125Gb/s, BER 1E-5;

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4. Mechanical Diagram



Note: External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.

5. Ordering Information

OEM	Part Number	OEM	Part Number
Arista	AOC-S-S-25G-1M-L	Intel	XXVAOCBL10M-L
Arista	AOC-S-S-25G-2M-L	Intel	XXVAOCBL12M-L
Arista	AOC-S-S-25G-3M-L	Intel	XXVAOCBL15M-L
Arista	AOC-S-S-25G-4M-L	Intel	XXVAOCBL20M-L
Arista	AOC-S-S-25G-5M-L	Intel	XXVAOCBL25M-L
Arista	AOC-S-S-25G-7M-L	Intel	XXVAOCBL30M-L
Arista	AOC-S-S-25G-10M-L	Juniper	JNP-25G-AOC-1M-L
Arista	AOC-S-S-25G-12M-L	Juniper	JNP-25G-AOC-2M-L
Arista	AOC-S-S-25G-15M-L	Juniper	JNP-25G-AOC-3M-L
Arista	AOC-S-S-25G-20M-L	Juniper	JNP-25G-AOC-4M-L

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Arista	AOC-S-S-25G-25M-L	Juniper	JNP-25G-AOC-5M-L
Arista	AOC-S-S-25G-30M-L	Juniper	JNP-25G-AOC-7M-L
Avago/Broadcom	AFBR-8CER01Z-L	Juniper	JNP-25G-AOC-12M-L
Avago/Broadcom	AFBR-8CER02Z-L	Juniper	JNP-25G-AOC-15M-L
Avago/Broadcom	AFBR-8CER03Z-L	Juniper	JNP-25G-AOC-20M-L
Avago/Broadcom	AFBR-8CER04Z-L	Juniper	JNP-25G-AOC-25M-L
Avago/Broadcom	AFBR-8CER05Z-L	Juniper	JNP-25G-AOC-30M-L
Avago/Broadcom	AFBR-8CER07Z-L	Juniper	JNP-25G-AOC-10M-L
Avago/Broadcom	AFBR-8CER10Z-L	Lenovo	7Z57A035411-L
Avago/Broadcom	AFBR-8CER12Z-L	Lenovo	7Z57A035412-L
Avago/Broadcom	AFBR-8CER15Z-L	Lenovo	7Z57A03541-L
Avago/Broadcom	AFBR-8CER20Z-L	Lenovo	7Z57A035414-L
Avago/Broadcom	AFBR-8CER25Z-L	Lenovo	7Z57A03542-L
Avago/Broadcom	AFBR-8CER30Z-L	Lenovo	7Z57A035427-L
Cisco	SFP-25G-AOC2M-L	Lenovo	7Z57A03543-L
Cisco	SFP-25G-AOC3M-L	Lenovo	7Z57A0354312-L
Cisco	SFP-25G-AOC4M-L	Lenovo	7Z57A03544-L
Cisco	SFP-25G-AOC5M-L	Lenovo	7Z57A03545-L
Cisco	SFP-25G-AOC7M-L	Lenovo	7Z57A0354525-L
Cisco	SFP-25G-AOC20M-L	Lenovo	7Z57A0354530-L
Cisco	SFP-25G-AOC25M-L	Mellanox	MFA2P10-A001-L
Cisco	SFP-25G-AOC30M-L	Mellanox	MFA2P10-A002-L
Cisco	SFP-25G-AOC10M-L	Mellanox	MFA2P10-A003-L
Cisco	SFP-25G-AOC12M-L	Mellanox	MFA2P10-A004-L
Cisco	SFP-25G-AOC15M-L	Mellanox	MFA2P10-A005-L
Cisco	SFP-25G-AOC1M-L	Mellanox	MFA2P10-A007-L
Dell	AOC-SFP-25G-1M-L	Mellanox	MFA2P10-A010-L
Dell	AOC-SFP-25G-2M-L	Mellanox	MFA2P10-A012-L
Dell	AOC-SFP-25G-3M-L	Mellanox	MFA2P10-A015-L
Dell	AOC-SFP-25G-4M-L	Mellanox	MFA2P10-A020-L
Dell	AOC-SFP-25G-5M-L	Mellanox	MFA2P10-A025-L
Dell	AOC-SFP-25G-7M-L	Mellanox	MFA2P10-A030-L
Dell	AOC-SFP-25G-10M-L	MSA	SFP25G-AOC-1M-L
Dell	AOC-SFP-25G-12M-L	MSA	SFP25G-AOC-2M-L

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Dell	AOC-SFP-25G-15M-L	MSA	SFP25G-AOC-3M-L
Dell	AOC-SFP-25G-20M-L	MSA	SFP25G-AOC-4M-L
Dell	AOC-SFP-25G-25M-L	MSA	SFP25G-AOC-5M-L
Dell	AOC-SFP-25G-30M-L	MSA	SFP25G-AOC-7M-L
Dell	470-ACIK-L	MSA	SFP25G-AOC-10M-L
Edgecore	ET7302-25AOC-1M-L	MSA	SFP25G-AOC-12M-L
Edgecore	ET7302-25AOC-2M-L	MSA	SFP25G-AOC-15M-L
Edgecore	ET7302-25AOC-3M-L	MSA	SFP25G-AOC-20M-L
Edgecore	ET7302-25AOC-4M-L	MSA	SFP25G-AOC-25M-L
Edgecore	ET7302-25AOC-5M-L	MSA	SFP25G-AOC-30M-L
Edgecore	ET7302-25AOC-7M-L	MSA	LN-SFP25G-AOC-10M
Edgecore	ET7302-25AOC-10M-L	MSA	LN-SFP25G-AOC-12M
Edgecore	ET7302-25AOC-12M-L	MSA	LN-SFP25G-AOC-15M
Edgecore	ET7302-25AOC-15M-L	MSA	LN-SFP25G-AOC-1M
Edgecore	ET7302-25AOC-20M-L	MSA	LN-SFP25G-AOC-20M
Edgecore	ET7302-25AOC-25M-L	MSA	LN-SFP25G-AOC-25M
Edgecore	ET7302-25AOC-30M-L	MSA	LN-SFP25G-AOC-2M
Extreme	25G-SFP28-SFP28-AOC-001-L	MSA	LN-SFP25G-AOC-30M
Extreme	25G-SFP28-SFP28-AOC-002-L	MSA	LN-SFP25G-AOC-3M
Extreme	25G-SFP28-SFP28-AOC-003-L	MSA	LN-SFP25G-AOC-4M
Extreme	25G-SFP28-SFP28-AOC-004-L	MSA	LN-SFP25G-AOC-5M
Extreme	25G-SFP28-SFP28-AOC-005-L	MSA	LN-SFP25G-AOC-7M
Extreme	25G-SFP28-SFP28-AOC-007-L	Siemon	S1S28F-V01.0M13-L
Extreme	25G-SFP28-SFP28-AOC-010-L	Siemon	S1S28F-V02.0M13-L
Extreme	25G-SFP28-SFP28-AOC-012-L	Siemon	S1S28F-V03.0M13-L
Extreme	25G-SFP28-SFP28-AOC-015-L	Siemon	S1S28F-V04.0M13-L
Extreme	25G-SFP28-SFP28-AOC-020-L	Siemon	S1S28F-V05.0M13-L
Extreme	25G-SFP28-SFP28-AOC-025-L	Siemon	S1S28F-V07.0M13-L
Extreme	25G-SFP28-SFP28-AOC-030-L	Siemon	S1S28F-V010.0M13-L
Finisar	FCBG125SD1C01-L	Siemon	S1S28F-V12.0M13-L
Finisar	FCBG125SD1C02-L	Siemon	S1S28F-V15.0M13-L
Finisar	FCBG125SD1C03-L	Siemon	S1S28F-V20.0M13-L
Finisar	FCBG125SD1C04-L	Siemon	S1S28F-V25.0M13-L
Finisar	FCBG125SD1C05-L	Siemon	S1S28F-V30.0M13-L

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Finisar	FCBG125SD1C07-L	Ubiquiti	SFP25G-U-AOC-1M-L
Finisar	FCBG125SD1C20-L	Ubiquiti	SFP25G-U-AOC-2M-L
Finisar	FCBG125SD1C25-L	Ubiquiti	SFP25G-U-AOC-3M-L
Finisar	FCBG125SD1C30-L	Ubiquiti	SFP25G-U-AOC-4M-L
Finisar	FCBG125SD1C10-L	Ubiquiti	SFP25G-U-AOC-5M-L
Finisar	FCBG125SD1C12-L	Ubiquiti	SFP25G-U-AOC-7M-L
Finisar	FCBG125SD1C15-L	Ubiquiti	SFP25G-U-AOC-10M-L
Intel	XXVAOCBL1M-L	Ubiquiti	SFP25G-U-AOC-12M-L
Intel	XXVAOCBL2M-L	Ubiquiti	SFP25G-U-AOC-15M-L
Intel	XXVAOCBL3M-L	Ubiquiti	SFP25G-U-AOC-20M-L
Intel	XXVAOCBL4M-L	Ubiquiti	SFP25G-U-AOC-25M-L
Intel	XXVAOCBL5M-L	Ubiquiti	SFP25G-U-AOC-30M-L
Intel	XXVAOCBL7M-L		