

# Product Datasheet

# 68Y6947-C

## IBM® Compatible 10Gb/s SFP+ Direct Attach Cable Copper, Passive, 3m

## **FEATURES**

- Available lengths 0.5m to 10m
- Supports multi-gigabit data rates up to 10.5Gbps
- Supports 1x, 2x, 4x and 8x Fiber Channel data rates
- Hot-pluggable SFP 20PIN footprint
- Serial ID module on MOD (0-2)
- AC coupling of PECL signals
- EMI/EMC performance
- Low Power Consumption < 0.5W
- Power Supply:+3.3V
- Compliant to SFP+ MSA
- Temperature Range: 0~ 70 °C
- ROHS

## APPLICATIONS

- Storage Area Networks (SAN), Network Attached Storage and Storage Servers
- 1G/2G/4G/8G Fiber Channel
- Switched fabric I/O such as ultra-high bandwidth switches and routers
- Data center cabling infrastructure
- High density connections among network equipment

#### **STANDARDS**

• Compliant with SFP MSA (INF-8074i)

#### DESCRIPTION

ATGBICS Compatible 68Y6947-C SFP+ cable is a high-performance, cost effective I/O solution for 10Gb Ethernet and 10G Fiber Channel applications. SFP+ copper modules allow hardware manufacturers to achieve high port density, configurability and utilization at a very low cost and to reduce power budget. The high-speed cable assemblies meet and exceed the performance and reliability requirements stipulated by Gigabit Ethernet and Fiber Channel industry standard.



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## **Recommended Operating Environment:**

Parameter	Symbol	Min	Typical	Max	Unit
Storage Ambient Temperature		-40		+85	°C
Operating Case Temperature	Тс	0		+70	°C
Power Supply Voltage	VCC	3.14	3.3	3.47	V
Power Dissipation	PD			0.5	W

#### **Systems**

Performance	Media
10.5 Gpbs line speed, full duplex	Hot-pluggable, industry-standard Small Form-Factor
Bit error rate: better than 10E-12	

## Specifications (Tested under recommended operating conditions, unless otherwise noted)

Parameter	Symbol	Min	Туре	Мах	Units	Notes
Electrical Characteristics						
Supply Current	lcc	-	-	100	mA	1
Transmitter Differential Input Voltage (PECL)	VIN	250	-	1200	mVpp	
Receiver Differential Output Voltage (PECL)	VO	185	-	1000	mVpp	
Impedance	Zcable	90	100	110	Ohms	
MOD-DEF1, 2	VIH	2.0	-	Vcc	V	

#### Note:

1. The supply current includes SFP Module's supply current and test board working current.



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#### **Physical Data**

Parameter	Description	30AWG	24AWG	Units
Cable Diameter	OD	4.5	6.5	mm
Bend Radius	Minimum Sustained Bend	25	35	mm

#### **AWG Information**

Reach @ 10Gb/s (m)	AWG
0.5	30
1	30
3	30
5	24
7	24
10	24

## **Mechanical Information**

