IBM COMPATIBLE 90Y9424 Quick Spec:

Part Number	90Y9424
Form Factor:	SFP
TX Wavelength:	1310nm
Reach:	10km
Cable Type:	SMF
Rate Category:	1000Base
Interface Type:	LX
DDM:	No
Connector Type:	Dual-LC

IBM COMPATIBLE 90Y9424 Features

- Up to 1.25Gb/s data links
- Hot-pluggable SFP Footprint
- Compliant with specifications for IEEE802.3Z
- Eye Safety Designed to meet Laser Class1 Compliant with IEC60825-1
- Single +3.3V Power Supply
- RoHS compliance
- 10km links on standard 9/125 micron singlemode fiber
- Operating temperature range:
  - Standard 0 to +70 °C
  - Industrial -40 to +85 °C

IBM COMPATIBLE 90Y9424 Applications

- Gigabit Ethernet
- 1x Fiber Channel
- Other optical links

IBM COMPATIBLE 90Y9424 Specification

Electrical and Optical Characteristics (Condition: Ta=TOP)

Parameter	Symbol	Min.	Typ	Max.	Unit
Transmitter Differential Input Volt	+/-TX_DAT	650		2000	mV p-p
Supply Current	I_{CC}		200	250	mA
Tx_Disable Input Voltage – Low	V_{IL}	0		0.8	V
Tx_Disable Input Voltage – High	V_{IH}	2.0		Vcc	V
Tx_Fault Output Voltage – Low	V_{OL}	0		0.8	V
Tx_Fault Output Voltage – High	V_{OH}	2.0		Vcc	V
Receiver Differential Output Volt	+/-RX_DAT	0.4		2000	mV p-p
Rx_LOS Output Voltage- Low	V_{OL}	0		0.8	V
Rx_LOS Output Voltage- High	V_{OH}	2.0		Vcc	V

Optical Characteristics

TX					
Parameter	**Symbol**	**Min**	**Typ**	**Max**	**Unit**
Data Rate	B	-	1250	-	Mb/s
Centre wavelength	λc	1296	1310	1330	nm
Output Spectral Width	△λ	-	-	4	nm
Average Output Power	P_o	-9	-	-3	dBm
Extinction Ratio	EXT	10	-	-	dB
Data Input Voltage-High	V_{IHS}	V_{cc}-1.16	-	V_{cc}-0.89	V
Data Input Voltage -Low	V_{ILS}	V_{cc}-1.82	-	V_{cc}-1.48	V
Supply Current	I_{CC}	-	90	150	mA
Output Optical Eye	Compliant with IEEE802.3Z				

RX					
Parameter	**Symbol**	**Min**	**Typ**	**Max**	**Unit**
Receive Sensitivity	P_{min}	-	-	-21	dBm
Maximum Input Power	P_{MAX}	-3	0	-	dBm
Signal Detect Threshold-Assertion:	SD_{HIGH}	-	-	-23	dBm
Signal Detect Threshold-Deassertion:	SD_{LOW}	-35	-	-	dBm
Hysteresis	-	-	2.0	-	dBm
Output High Voltage	V_{OH}	V_{cc}-1.03	-	V_{cc}-0.89	V
Output Low Voltage	V_{OL}	V_{cc}-1.82	-	V_{cc}-1.63	V
Operating Wavelength	λc	1100	-	1600	nm
Supply Current	I_{CC}	-	80	110	mA

Absolute Maximum Ratings (T_C=25℃)

Parameter	Symbol	Min	Max	Unit
Storage Temperature	T_{ST}	-40	+85	°C
Operating Temperature (Standard)	T_{IP}	0	+70	°C
Operating Temperature (Industrial)	T_{IP}	-40	+85	°C
Input Voltage	T_{CC}	0	5	V

Recommended Operation Environment

Parameter	Symbol	Min	Typ	Max	Unit
Supply Voltage	V_{CC}	+3.0	3.3	+3.6	V
Operating Temperature	T_{OP}	0	-	+50	°C