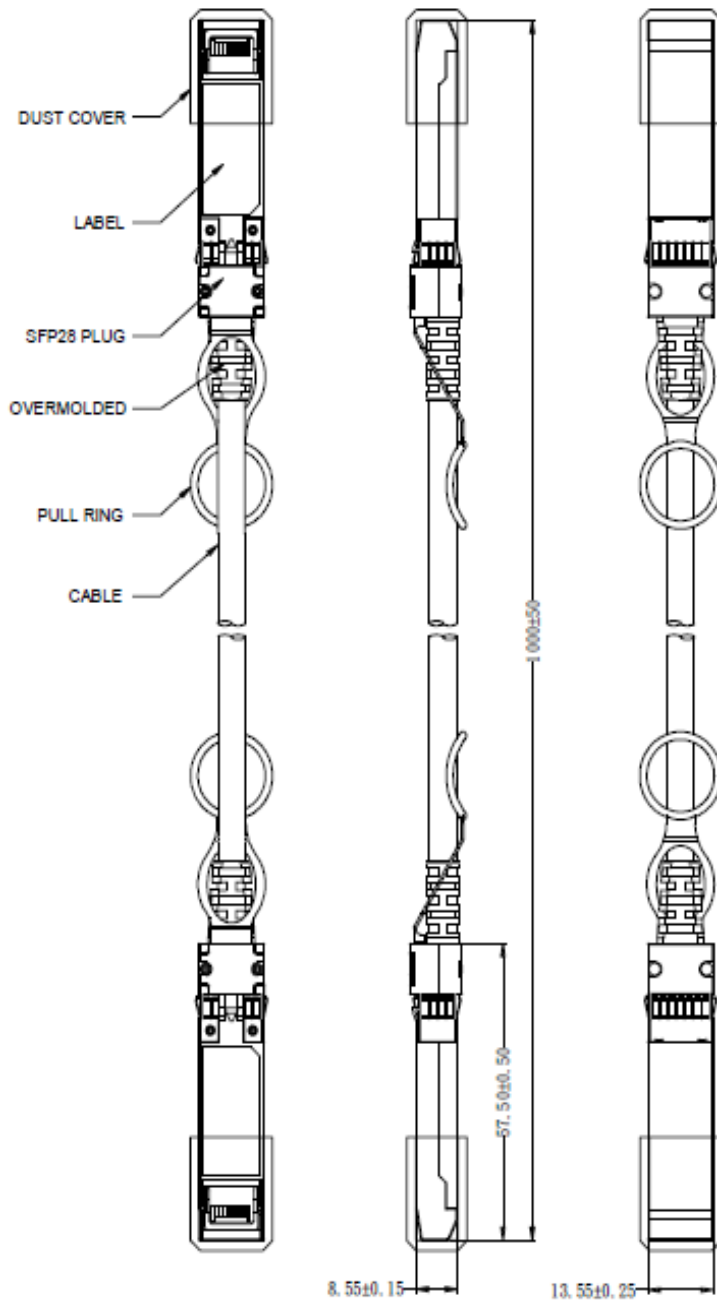
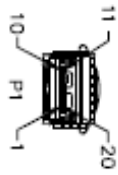
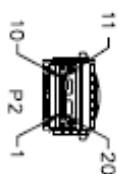


1. Mechanical Dimension

Unit:mm	General Tolerance :	X.X : ± 0.38
		X.XX : ± 0.20



WIRE TABLE			
P1 PAD		P2 PAD	
12	RX-	19	TX-
13	RX+	18	TX+
18	TX+	13	RX+
19	TX-	12	RX-



5. Electrical Characteristics

5.1 Insertion loss, Sdd21

Shall be greater than or equal to the minimum insertion loss:

$$IL_{\min}(f) = 0.7\sqrt{f} + 0.3f + 0.01f^2 \quad 0.01 \leq f \leq 19 \quad f \text{ is the frequency in GHz}$$

Shall be less than or equal to the maximum insertion loss of 22.48 dB at 12.8906 GHz

5.2 Differential return loss, Sdd11/Sdd22

$$RL(f) \geq \begin{cases} 16.5 - 2\sqrt{f} & 0.05 \leq f < 4.1 \\ 10.66 - 14 \log_{10}(f/5.5) & 4.1 \leq f \leq 19 \end{cases} \quad f \text{ is the frequency in GHz}$$

5.3 Differential to common-mode return loss, Scd11/Scd22

$$RL(f) \geq \begin{cases} 22 - (20/25.78)f & 0.01 \leq f < 12.89 \\ 15 - (6/25.78)f & 12.89 \leq f \leq 19 \end{cases} \quad f \text{ is the frequency in GHz}$$

5.4 Difference between the differential to common-mode conversion loss and the insertion loss, Scd21 – Sdd21

$$Scd21 - Sdd21 \geq \begin{cases} 10 & 0.01 \leq f < 12.89 \\ 27 - (29/22)f & 12.89 \leq f < 15.7 \\ 6.3 & 15.7 \leq f \leq 19 \end{cases} \quad f \text{ is the frequency in GHz}$$

5.5 Common-mode to common-mode return loss, Scc11/Scc22

$$RL(f) \geq 2 \quad 0.2 \leq f \leq 19 \quad f \text{ is the frequency in GHz}$$

5.6 Differential impedance (Reference)

100±15 ohm; rise time of 23.1 ps (10%-90%)