

DATA NETWORKING

OPTICAL TRANSCEIVER CONNECTORS

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CFP FAMILY

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OPTICAL TRANSCEIVER CONNECTORS

SFP28 - 25* GBIT/S

DSFP - 50*/100** GBIT/S

QSFP28 - 100*/200** GBIT/S

QSFP56 - 200*/400** GBIT/S

QSFP-DD - 200*/400** GBIT/S

OSFP - 200*/400** GBIT/S

CFP8 - 25* GBIT/S

CFP4 - 50*/100** GBIT/S

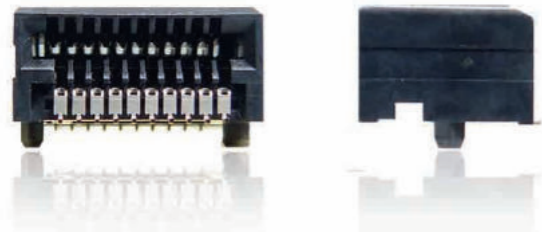
CFP2 - 100*/200** GBIT/S

CFP - 200*/400** GBIT/S

SFP28 HOST CONNECTOR

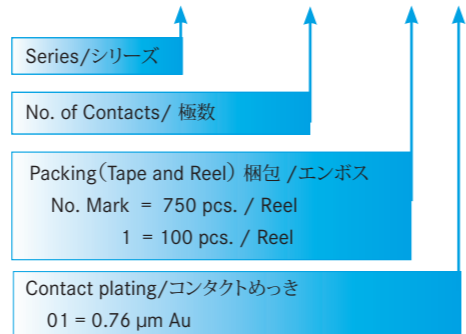
The enhanced small form-factor pluggable (SFP+) connector supports data rates at 28Gbps. The design is in accordance with the Multi-Source Agreement (MSA).

SFP+コネクタ(The enhanced small form-factor pluggable connector)は28Gbpsのデータに対応します。製品はMSAに準拠。



PART NUMBER CONNECTOR

CN109S - 020 - 0x 01



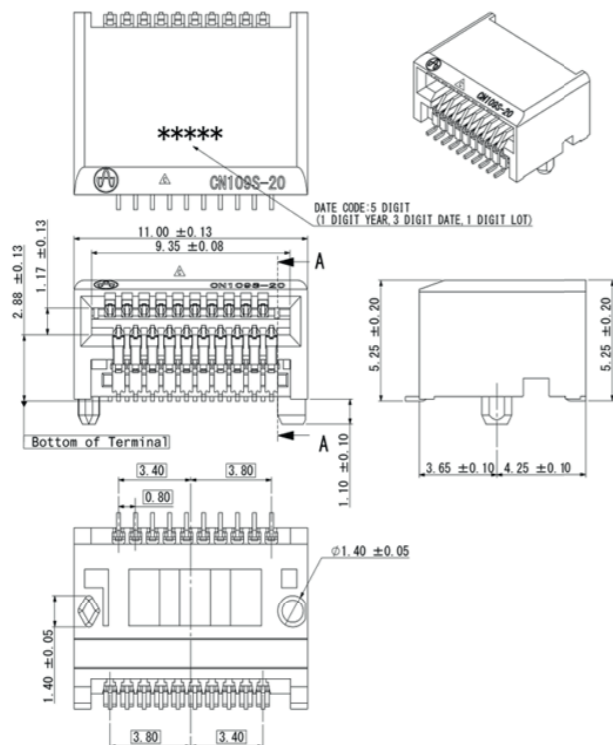
SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: 120 V AC max. / contact
- Current Rating/定格電流: 0.5A max. / contact
1.0A max./designated
- Operating Temp. Range/使用温度範囲: -20°C ~ 85°C
- Contact Resistance/接触抵抗: Max.35 m Ω
(100mA Max / 20mV Max)
- Mating cycle/挿抜耐久性: Max 100 Cycles
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tape and Reel/エンボス

MATERIALS AND FINISH/材料・表面処理

- Insulator/インシュレーター: LCP
- Contacts/コンタクト: Copper Alloy, Ni-Au

OUTLINE DIMENSIONS /外径寸法 CN109S - 020 - 0*01

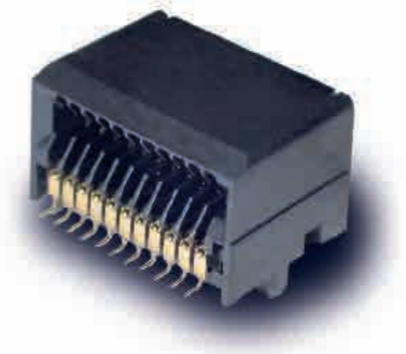


FEATURES/特長

- Transmission performance/伝送性能: NRZ 28Gbps (28Gbps/ch x 1ch)
- Pitch/コンタクトピッチ: 0.8 mm
- Pin count/極数: 20 pins
- Complies RoHS

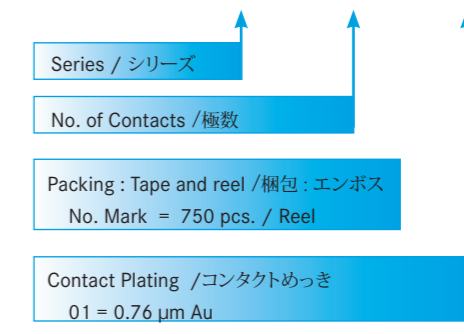
DSFP HOST CONNECTOR

PAM4 56G
DSFP Series



PART NUMBER CONNECTOR

CN109S - 022 - 0001



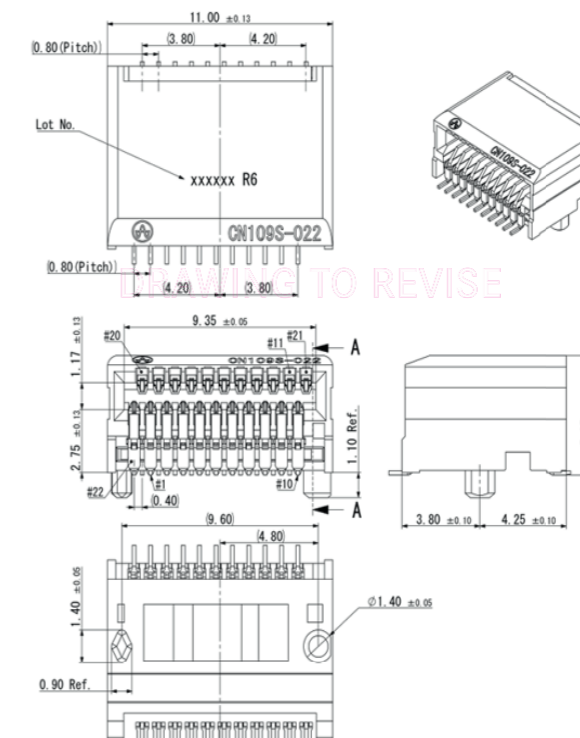
SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: 120 V AC max. / contact
- Current Rating/定格電流: 0.5A max. / contact
1.0A max./designated
- Operating Temp. Range/使用温度範囲: -20°C ~ 85°C
- Contact Resistance/接触抵抗: Max.35 m Ω
(max.100 mA /max. 20m V.)
- Mating cycle/挿抜耐久性: Max 100cycles
- Test Standard/ 評価条件: EIA-364
- Packing/梱包: Tape and Reel/エンボス

MATERIALS AND FINISH/材料・表面処理

- Insulator/インシュレーター: LCP
- Contacts/コンタクト: Copper Alloy, Ni-Au

OUTLINE DIMENSIONS /外径寸法 CN109S - 022- 0001



FEATURES/特長

- Transmission performance: NRZ 56Gbps (28Gbps/ch x 2ch)
/伝送性能 PAM4 112Gbps (56Gbps/ch x 2ch)
- Pitch/ピッチ: 0.8 mm
- Pin count/極数: 22Pins
- Compatible with SPF+ and SFP28 Module /SFP+及びSFP28のモジュールと互換有り
- Complies DSFP MSA/DSFP MSA準拠
- Complies RoHS/RoHS準拠

SFP AND DSFP HOST CONNECTOR MECHANICAL PARTS

QSFP28 HOST CONNECTOR (STYLE B)

The enhanced QSFP+ (eQSFP+) connector and mechanical kit is supports data rates up to 56Gbps per channel. All products are designed in accordance with the Multi-Source Agreement (MSA).

eQSFP+コネクタとメカキットは56Gbps/chのデータレートをサポート。
製品デザインはMSAに準拠。



PART NUMBER MECHANICAL KIT

CN109A - 0002



PART NUMBER 28GBPS

CN120 - 038 - X 00 X

| | |
|---------------------------|-------|
| Series/シリーズ名 | CN120 |
| No. of Contacts/極数 | 038 |
| Type /製品タイプ | X |
| Contact Plating /コンタクトめっき | 00 |
| | X |

0 = Style B 1 = Style A 2 = Style A 56Gbps

1 = 0.76 μm Au 2 = 0.38 μm Au

SPECIFICATIONS/仕様

- Operating Temp. Range/ 使用温度範囲: -20° C~85° C
- Mating cycle/挿抜耐久性: 100 cycles
- Plug in Force/挿入力: Max.18 N
- Pull-out Force/抜去力: Max.12.5 N
- Packing/梱包: Tray/トレイ
- Test Standard/評価条件: EIA-364

FEATURES /特長

- Complies RoHS/RoHS準拠

MATERIALS AND FINISH/材料・表面処理

- Cage/ケージ: Stainless, Degreasing

SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: 30VDC max/contact
- Current Rating/定格電流: 0.5A max/contact
- Operating Temp. Range/使用温度範囲: -20° C~ 85° C
- Mating cycle /挿抜耐久性: 0.76μm / 250 cycles
0.38μm / 50 cycles
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tape and Reel/エンボス

MATERIALS AND FINISH/材料・表面処理

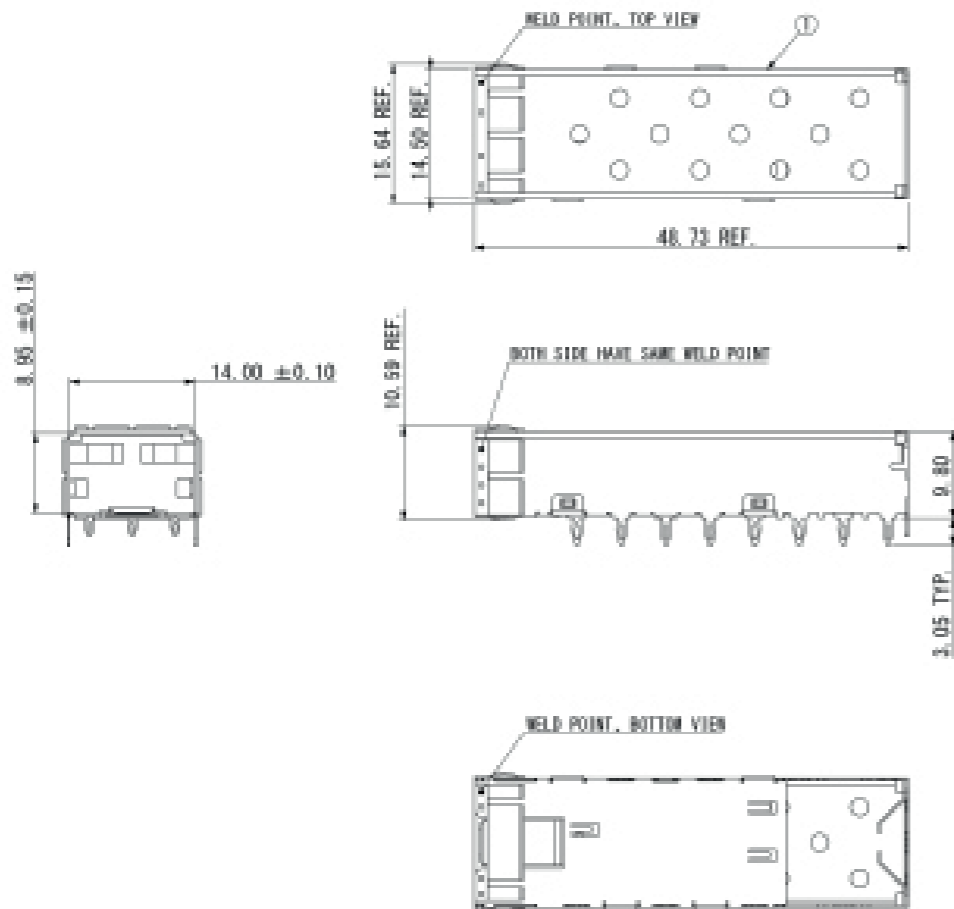
- Insulator/インシュレーター: LCP
- Contact/コンタクト: Copper Alloy, Ni-Au/Sn

FEATURES/特長

- Transmission performance: NRZ 100Gbps (28Gbps/ch x 4ch)
/伝送性能 PAM4 200Gbps (56Gbps/ch x 4ch)
- Pitch/コンタクトピッチ: 0.8 mm
- Pin Count/極数: 38 Pins
- Compatible with existing QSFP (Infiniband: QDR / FDR / EDR) module /QSFPモジュール(QDR/FDR/EDR)と互換性あり
- Fully compatible foot pattern with existing QSFPconnector /QSFP+との互換性があるフットパターン
- Complies RoHS/RoHS準拠

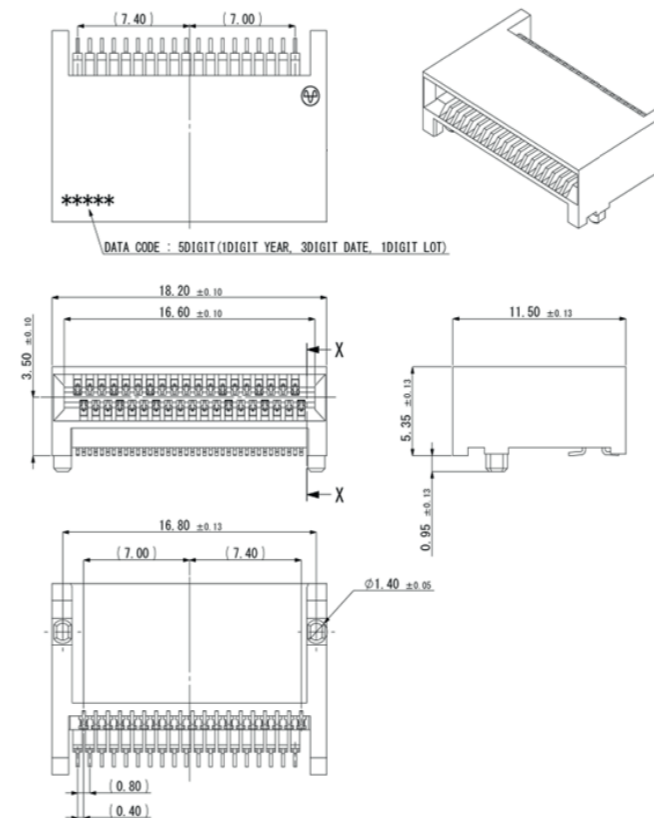
OUTLINE DIMENSIONS /外径寸法

CN109A - 0002



OUTLINE DIMENSIONS /外径寸法

CN120 - 038 - 0001 STYLE B



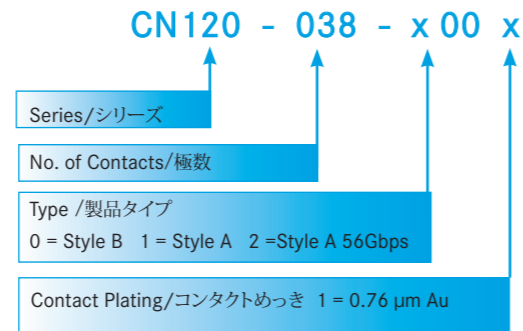
STYLE DEFINITION/スタイルの定義

| Style | SFF Spec. | Peg to Row B |
|-------|-----------|--------------|
| B | SFF 8672 | 7.69 |
| A | SFF | |

QSFP28 HOST CONNECTOR (STYLE A)



PART NUMBER 28GBPS



SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: Max. 30V DC/contact
- Current Rating/定格電流: Max. 0.5A/contact
- Contact Resistance/接触抵抗: Max. 10 mΩ (Max100 mA/Max20 mV)
- Operating Temp.Range/使用温度範囲: Max.65° C
- Mating cycle/挿抜耐久性: 250cycles
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tape and Reel/エンボス

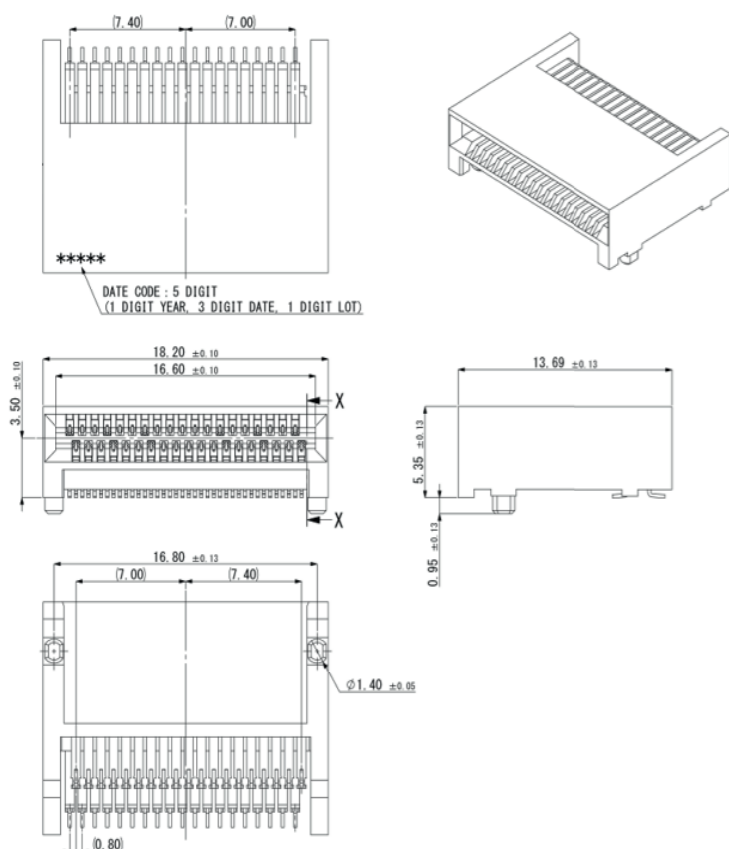
FEATURES/特長

- Transmission performance: NRZ 100Gbps (28Gbps/ch x 4ch) /伝送性能 PAM4 100Gbps (56Gbps/ch x 4ch)
- Pitch/コンタクトピッチ: 0.8 mm
- Pin Count/極数: 38 Pins
- Compatible with existing QSFP (Infiniband: QDR / FDR / EDR) module /QSFPモジュール(QDR/FDR/EDR)と互換性あり
- Complies RoHS/RoHS準拠

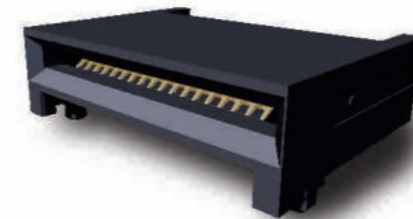
MATERIALS AND FINISH/材料・表面処理

- Insulator/インシュレーター: LCP
- Contact/コンタクト: Copper Alloy, Ni-Au/Sn

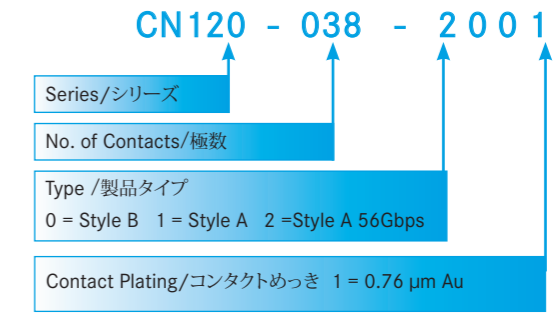
OUTLINE DIMENSIONS/外径寸法 CN120 - 038 - 1001 STYLE A



QSFP56 HOST CONNECTOR



PART NUMBER 56GBPS



SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: Max. 30V DC/contact
- Current Rating/定格電流: Max. 0.5A/contact
- Contact Resistance/接触抵抗: Max. 10 mΩ (Max100 mA/Max20 mV)
- Operating Temp.Range/使用温度範囲: Max.65° C
- Mating cycle/挿抜耐久性: 250cycles
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tape and Reel/エンボス

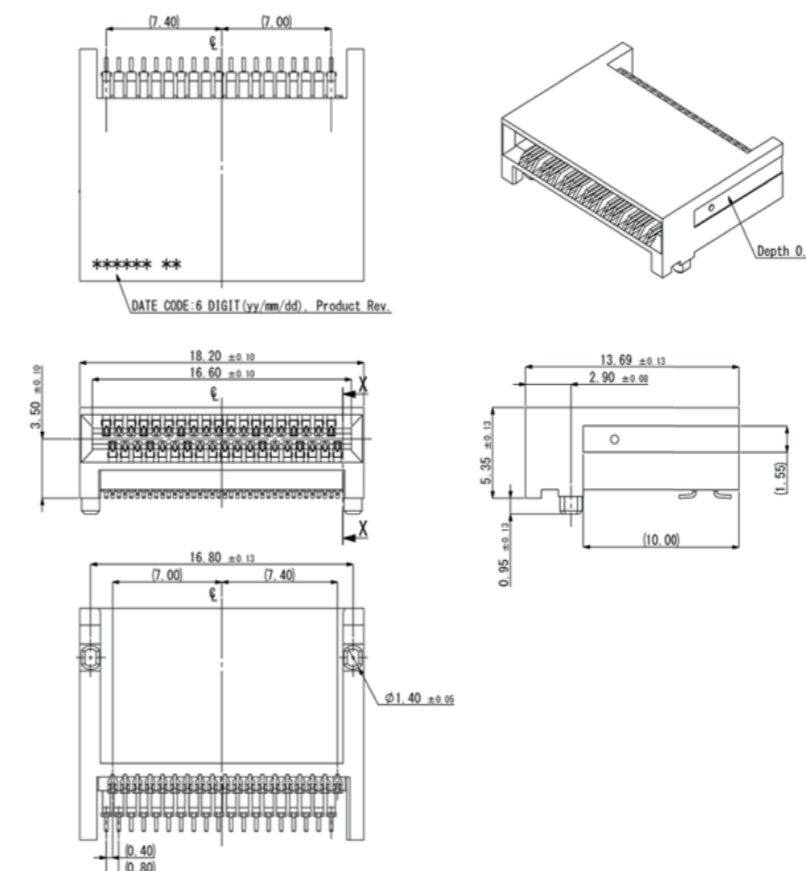
FEATURES/特長

- Transmission performance: NRZ 200Gbps (56Gbps/ch x 4ch) /伝送性能 PAM4 400Gbps (112Gbps/ch x 4ch)
- Pitch/コンタクトピッチ: 0.8 mm
- Pin Count/極数: 38 Pins
- Compatible with existing QSFP (Infiniband: QDR / FDR / EDR) module /QSFPモジュール(QDR/FDR/EDR)と互換性あり
- Complies RoHS/RoHS準拠

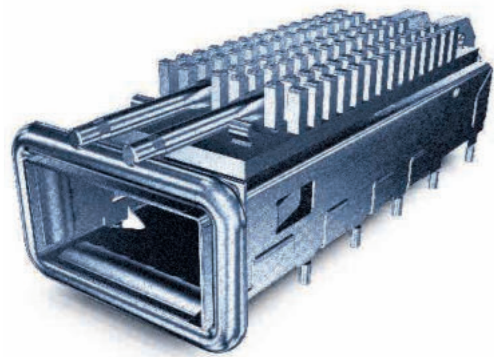
MATERIALS AND FINISH/材料・表面処理

- Insulator/インシュレーター: LCP
- Contact/コンタクト: Copper Alloy, Ni-Au/Sn

OUTLINE DIMENSIONS/外径寸法 CN120 - 038 - 2001



QSFP28 + 56 MECHANICAL PARTS



PART NUMBER MECHANICAL KIT

CN120A - xx x x - x x

- Series / シリーズ
- Cage Assembly Type:
11 = 1 x 1 Assembly
14 = 1 x 4 Assembly
- Type
0 = Style B 1 = Style A
- Product Type:
1 = EMI Elastomer Gasket
2 = Through Bezel (Spring Finger)
- Heatsink:
0 = No Heatsink
1 = With Heatsink (Height = 13.5 mm)
2 = With Heatsink (Height = 6.5 mm)
3 = With Heatsink (Height = 4.2 mm)
- Light Pipe:
0 = No Light Pipe
1 = Single Light Pipe (Cut-out ϕ 2.11)
2 = Dual Light Pipe (Cut-out ϕ 2.11)
3 = Single Light Pipe (Cut-out ϕ 2.54)
4 = Dual Light Pipe (Cut-out ϕ 2.54)
5 = Single Light Pipe (Cut-out ϕ 2.67)
6 = Dual Light Pipe (Cut-out ϕ 2.67)

SPECIFICATIONS/仕様

- Operating Temp.Range/使用温度範囲: -20°C~85°C
- Durability/挿抜耐久性: Max 100 cycles
- Plug in Force/挿入力: Max.55 N (with Heatsink)
- Pull-out Force/抜き力: Max.45 N (With Heatsink)
- Press fit insertion force /ラッチ保持力: Min.140 N
- Press fit insertion force /プレスフィット挿入力: Max.41.7N
- Press fit extraction force /プレスフィット抜き力: Min.4.5N
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tray/トレイ

MATERIALS AND FINISH/材料・表面処理

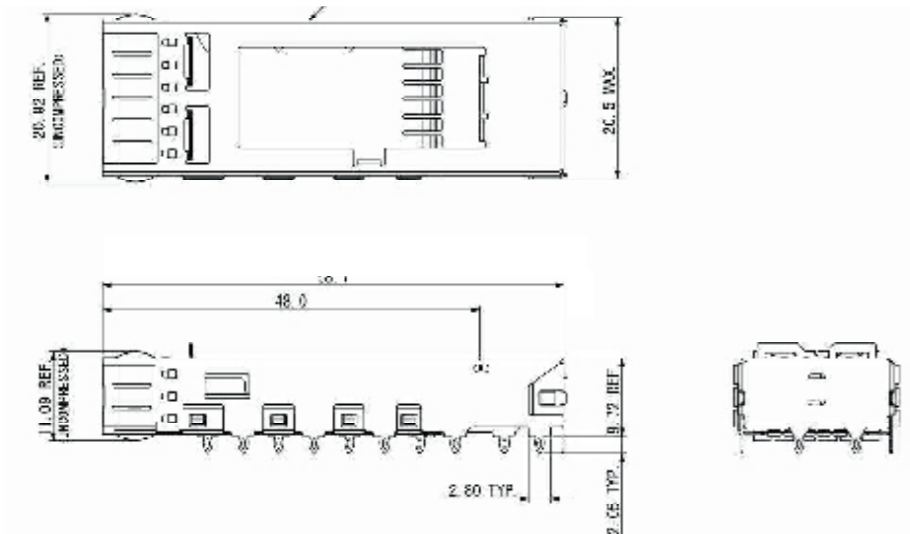
- Cage/ケージ: Stainless, Degreasin
- Heatsink/ヒートシンク: Aluminium, Anodizing Treatment
- Clip/クリップ: Stainless, Degreasing
- Light Pipe/ライトパイプ: Polycarbonate

FEATURES/特長

- Compatible with existing W7SFF-8683 / W7SFF-8683と互換性あり
- Optional single or double light pipes /ライトパイプ シングルタイプとダブルタイプを準備
- Heatsink with 3 different heights (4.2, 6.5 and 13.5 mm) / 3種類のヒートシンクをラインナップ(4.2, 6.5, 13.5 mm)
- Mechanical kit (Style A: available, Style B available) / Style AとStyle Bのメカ製品をラインアップ
- Complies RoHS / RoHS準拠

OUTLINE DIMENSIONS/外径寸法

CN120A - 1112 - 00



QSFP-DD HOST CONNECTOR

PAM4 56G
CN174 Series

QSFP-DD



PART NUMBER

CN174 S - 076 - 000x

- Series / シリーズ
- S = Host (SMT実装タイプ)
- No. of Contacts/極数
- Design No./開発順位
1 = 半田タブ無し 2 = 半田タブ有り

SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: Max. 30V DC/contact
- Current Rating/定格電流: Max. 0.5A/contact
- Operating Temp.Range/使用温度範囲: -20°C~85°C
- Contact Resistance/接触抵抗: Max.10m Ω (100mA max/20mV max)
- Mating cycle/挿抜耐久性: Max 100 cycles
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tape and Reel/エンボス

MATERIALS AND FINISH/材料・表面処理

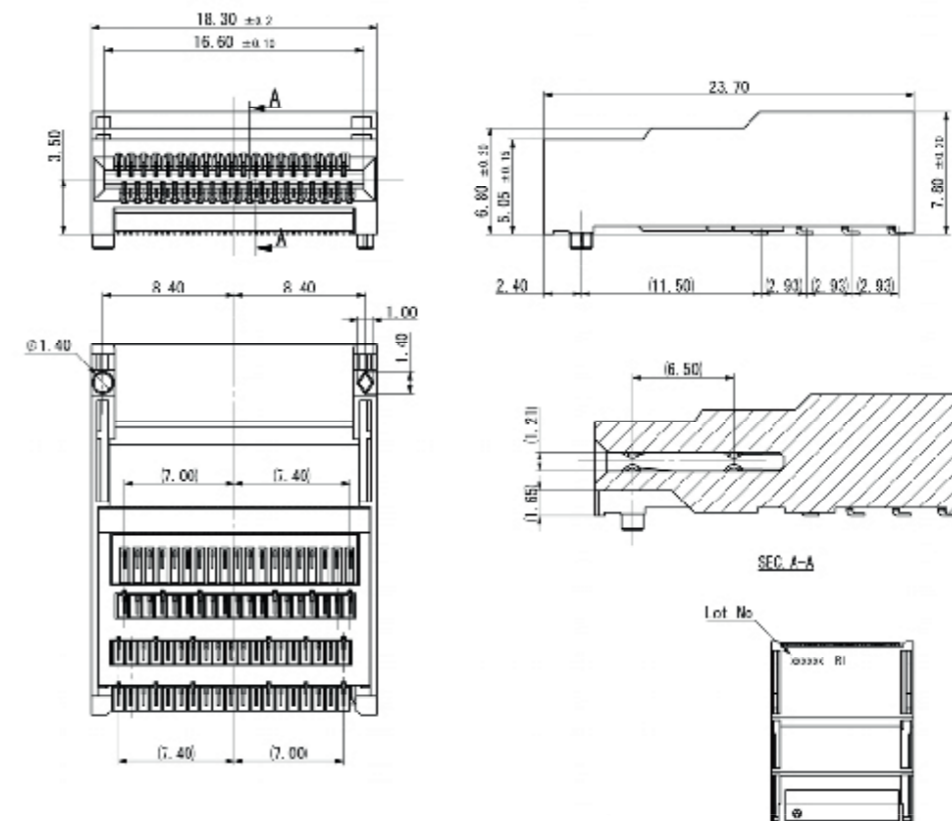
- Insulator/インシュレーター: LCP
- Contact/コンタクト: Copper Alloy, Ni-Au/Sn

FEATURES/特長

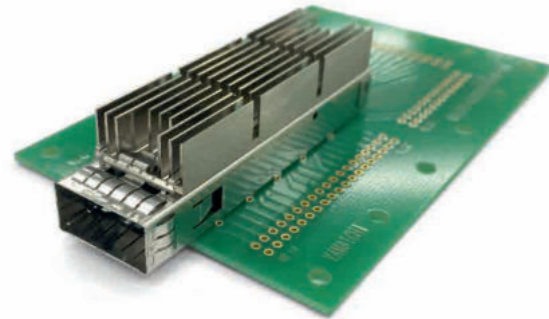
- Transmission performance/伝送性能: NRZ 200G (28Gbps/ch x 8ch)
PAM4 400G (56Gbps/ch x 8ch)
- Pitch/コンタクトピッチ: 0.8 mm
- Pin Count/極数: 76 Pins
- Complies QSFP-DD MSA / QSFP-DD MSA準拠
- Compatible with existing QSFP (Infiniband: QDR / FDR / EDR) module / QSFPモジュール(QDR/FDR/EDR)と互換性あり
- Complies RoHS / RoHS準拠

OUTLINE DIMENSIONS/外径寸法

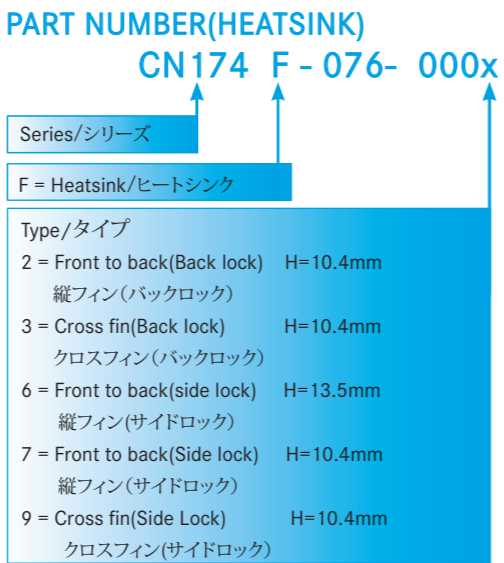
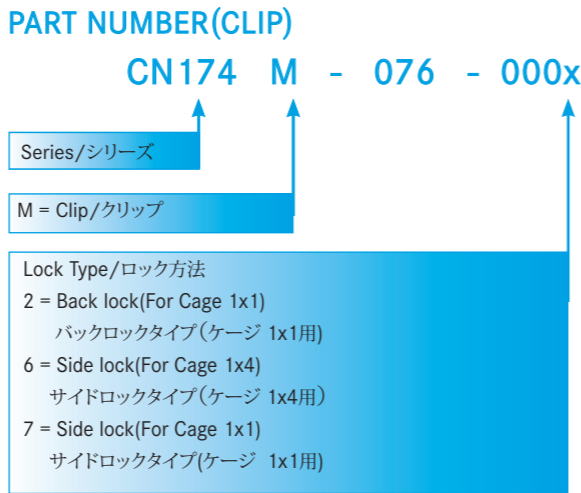
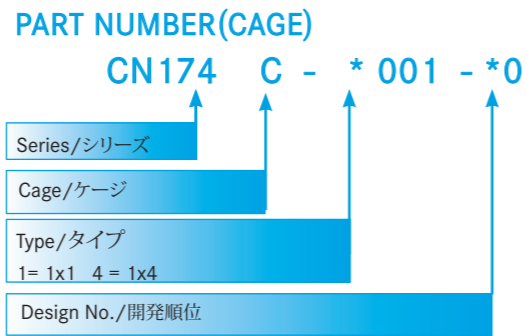
CN174S - 076 - 0001・CN174S - 076 - 0002



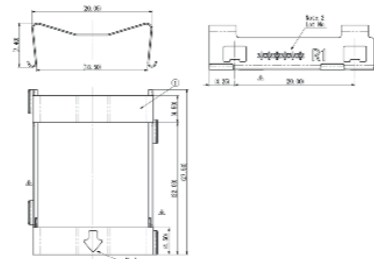
QSFP-DD MECHANICAL PARTS



PAM4 56G
CN174 Series



クリップ外径寸法(CN174M - 076 - 0007)



SPECIFICATIONS/仕様(CAGE)

- Operating Temp. Range/使用温度範囲: Max 85° C
- Durability/挿抜耐久性: Max 100 cycles
- Plug in Force/挿入力: Max.90 N (with Heatsink)
- Pull-out Force/抜去力: Max.50 N (With Heatsink)
- Packing/梱包: Tray/トレイ
- Test Standard/ テスト条件: EIA-364

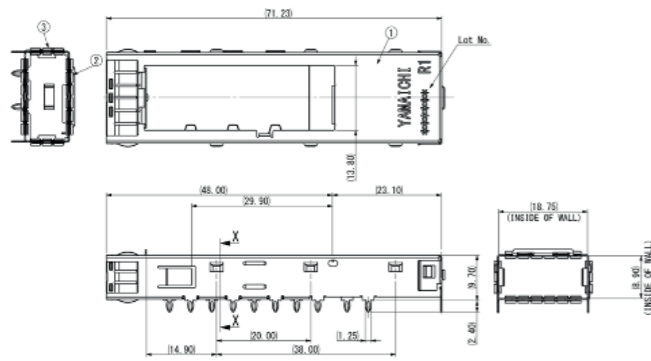
MATERIALS AND FINISH/材料・表面処理

- Cage/ケージ: Stainless, Degreasing
- Heatsink/ヒートシンク: Aluminium, Anodizing
- Clip/クリップ: Stainless, Degreasing

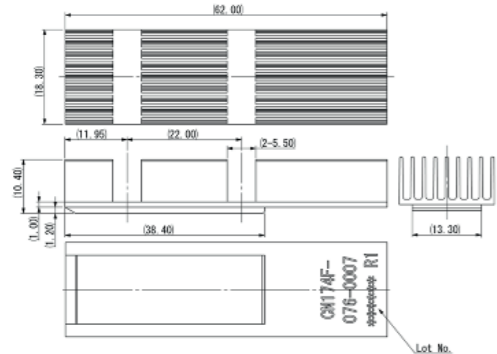
FEATURES /特長

- Complies QSFP-DD MSA/QSFP-DD MSA準拠
- Complies RoHS/RoHS準拠

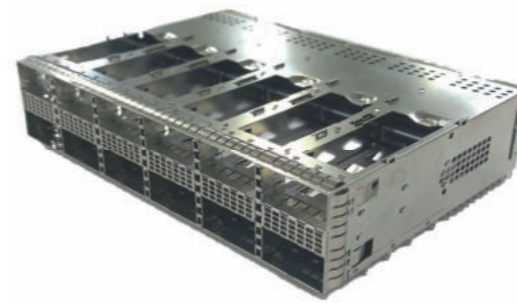
ケージ外形寸法(CN174C - 1001 - 03)



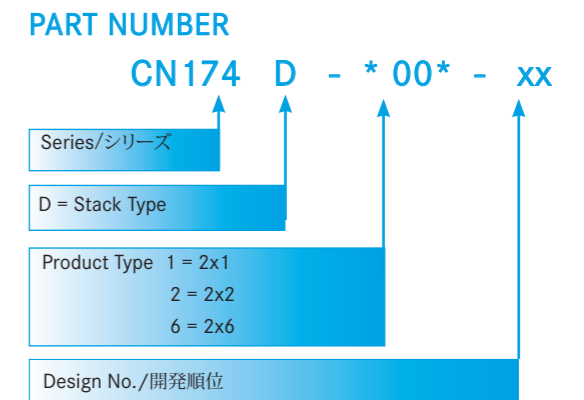
ヒートシンク外径寸法(CN174F - 076 - 0007)



QSFP-DD STACK MODEL



PAM4 56G
CN174 Series



SPECIFICATIONS/仕様

- Operating Temp. Range/使用温度範囲: -55° C ~ 85° C
- Mating cycle/挿抜耐久性: Max.100 cycles
- Plug in Force/挿入力: Max.60 N (with Heatsink)
- Pull-out Force/抜去力: Max.50 N (With Heatsink)
- Packing/梱包: Tray/トレイ
- Test Standard/評価条件: EIA-364

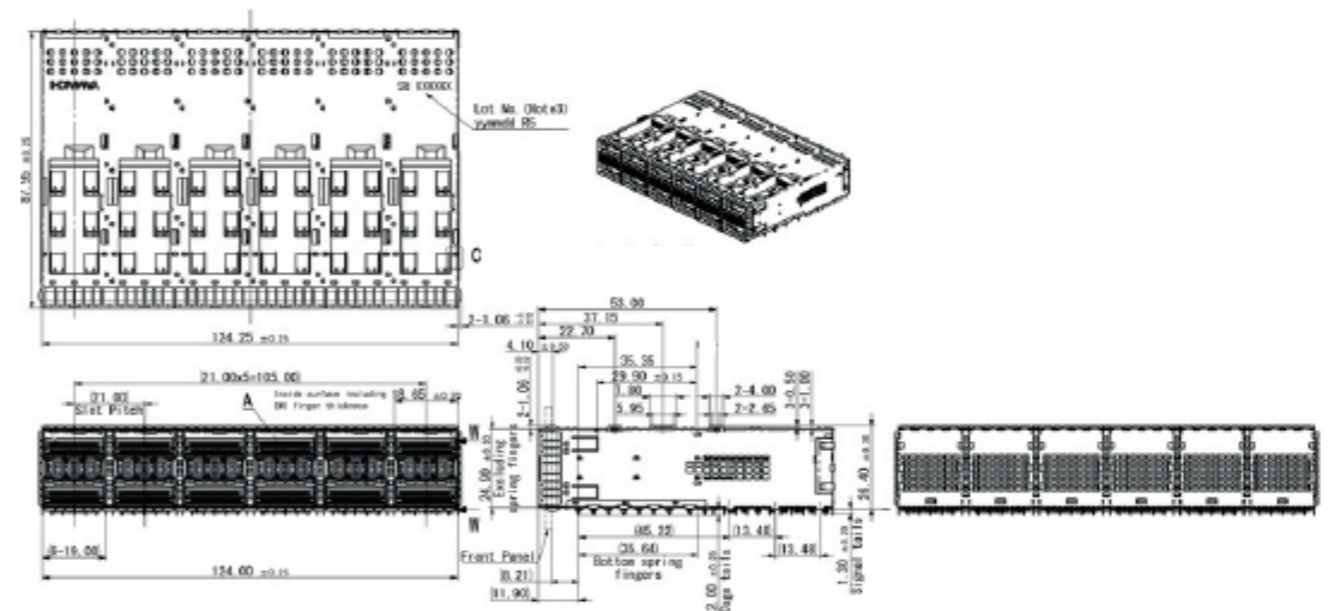
MATERIALS AND FINISH/材料・表面処理

- Cage/ケージ: Stainless, Degreasing
- Heatsink/ヒートシンク: Aluminium, Ni

FEATURES/特長

- Complies QSFP-DD MSA(2x1 Type)/QSFP-DD MSA準拠(2x1タイプ)
- Complies RoHS/RoHS準拠

OUTLINE DIMENSIONS/外径寸法 CN174D - 6002 - 02



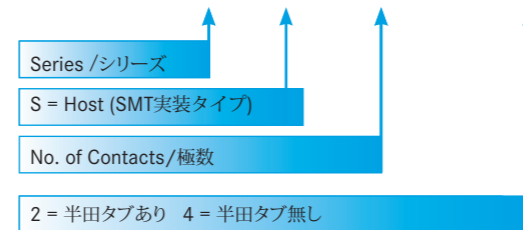
OSFP HOST CONNECTOR

PAM4 56G
CN176 Series



PART NUMBER

CN176 S - 060 - 000x



SPECIFICATIONS仕様

- Voltage Rating / 定格電圧: Max. 30V DC/ct
- Current Rating / 定格電流: Max. 0.5A/ct
- Contact Resistance / 接触抵抗: Max 20Ω (max 100mA/max 20mV)
- Operating Temp.Range / 使用温度範囲: -55° C ~ 85° C
- Mating Cycle / 挿抜耐久性: MAX 100 cycles
- Test Standard / 評価条件: EIA-364
- Packing / 梱包: Tape and Reel / エンボス

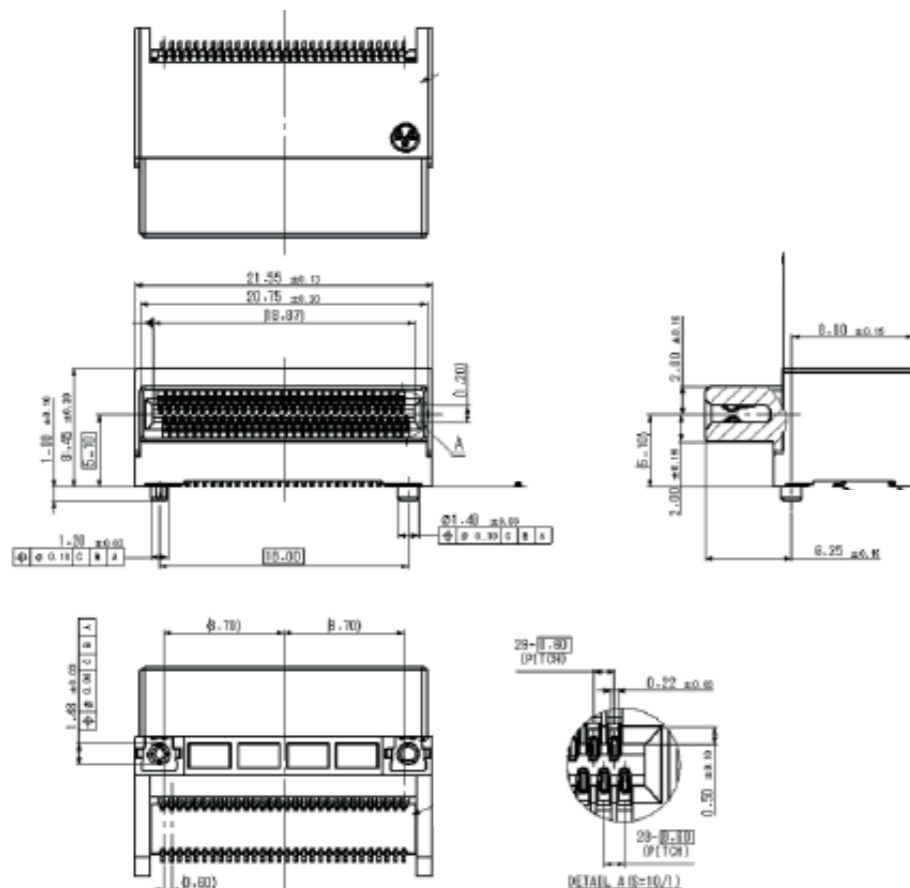
FEATURE/特長

- Transmission performance / 伝送性能: NRZ 200G (28Gbps/ch x 8ch)
PAM4 400G (56Gbps/ch x 8ch)
- Pitch / コンタクトピッチ: 0.6 mm
- Pin Count / 極数: 60 pins
- Complies OSFP MSA / OSFP MSA準拠
- Complies RoHS / RoHS準拠

MATERIALS AND FINISH/材料・表面処理

- Insulator / インシュレーター: LCP
- Contact / コンタクト: Copper Alloy, Ni-Au/Sn

OUTLINE DIMENSIONS/外径寸法 CN176S - 060 - 002



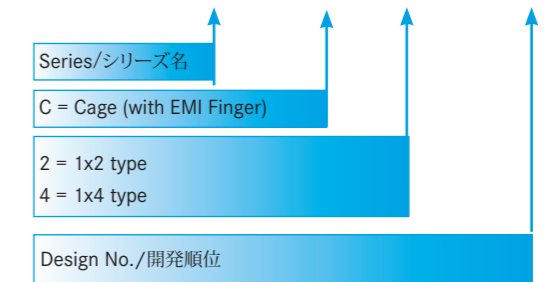
OSFP MECHANICAL PARTS

PAM4 56G
CN176 Series



PART NUMBER

CN176 - C - *001 - 0x



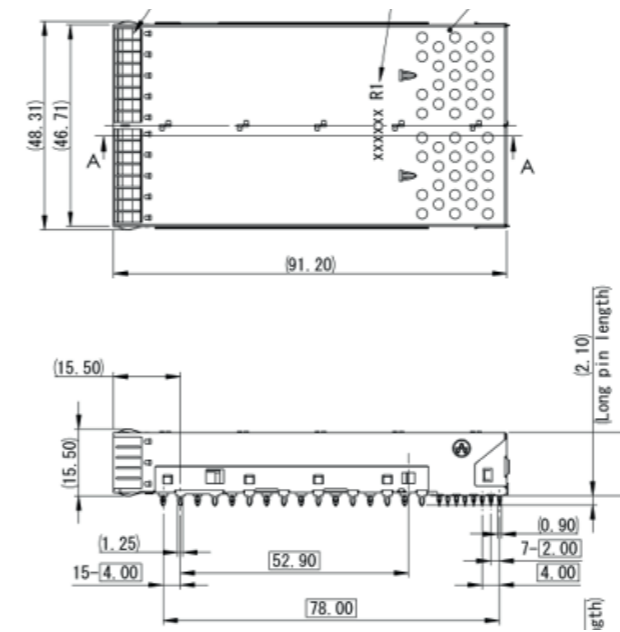
SPECIFICATIONS/仕様

- Operating Temp.Range / 使用温度範囲: -55 °C ~ 85 °C
- Mating cycle / 挿抜耐久性: 100 cycles
- Plug in Force / 挿入力: Max.40 N
- Pull-out Force / 抜去力: Max.30 N
- Packing / 梱包: Tray / トレイ
- Test Standard / 評価条件: EIA-364

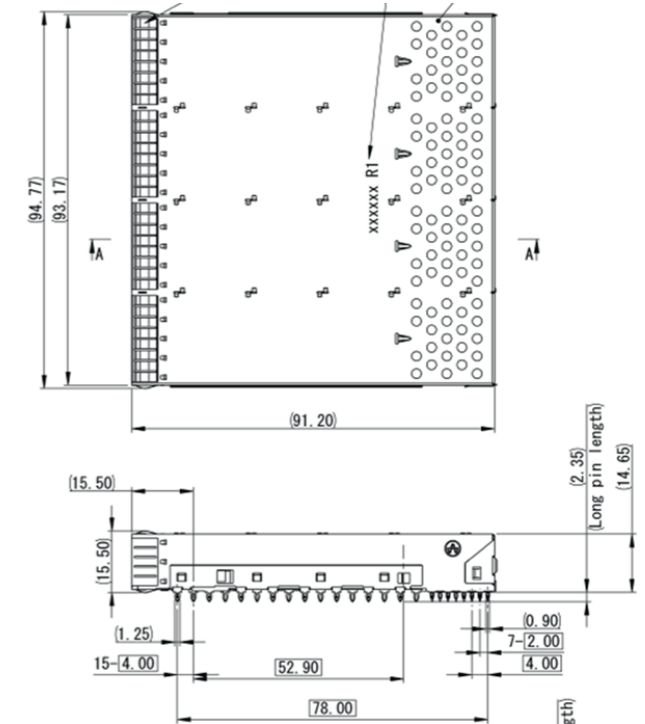
FEATURES / 特長

- Complies OSFP MSA / OSFP MSA準拠
- Complies RoHS / RoHS準拠

OUTLINE DIMENSIONS/外径寸法 CN176C - 2001 - 01



OUTLINE DIMENSIONS/外径寸法 CN176C - 4001 - 01



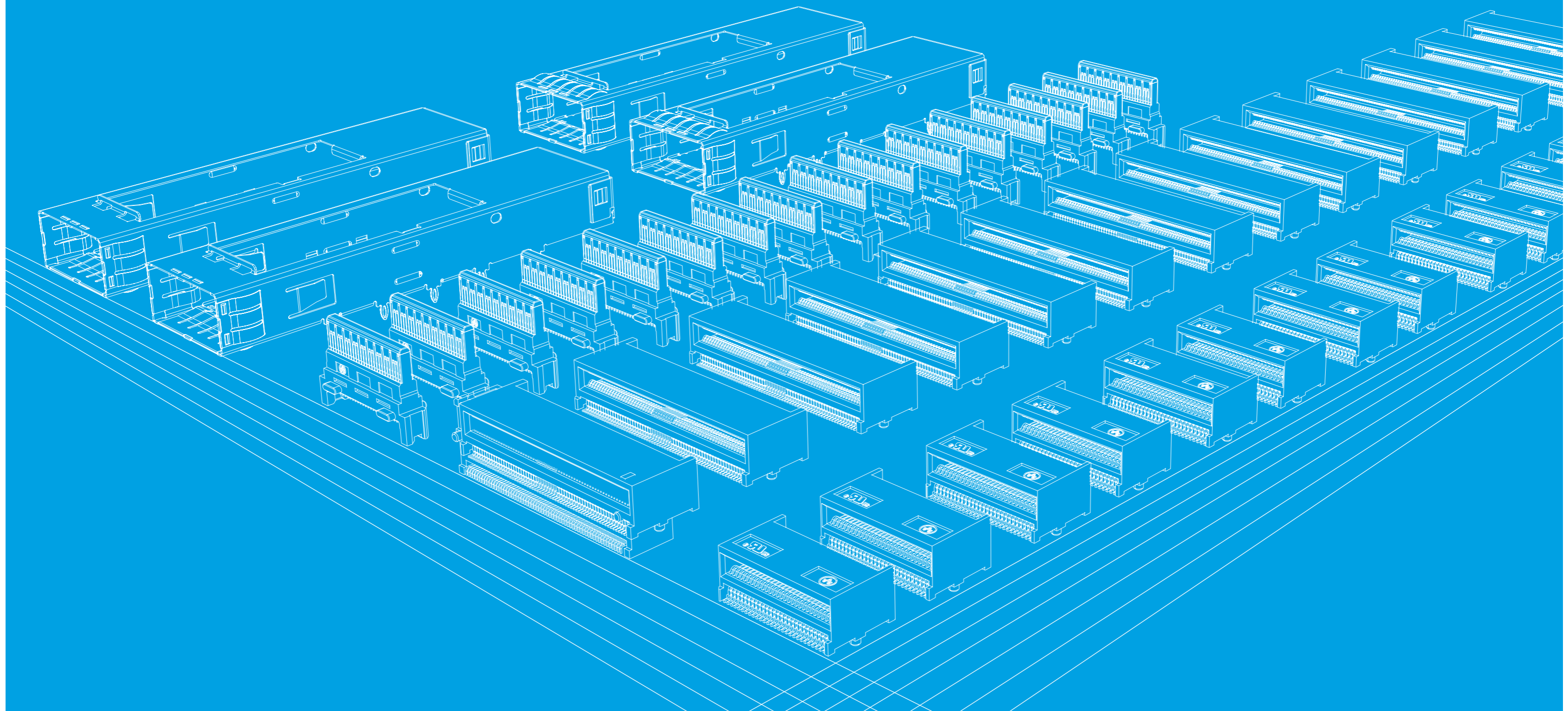
CFP FAMILY

CFP8

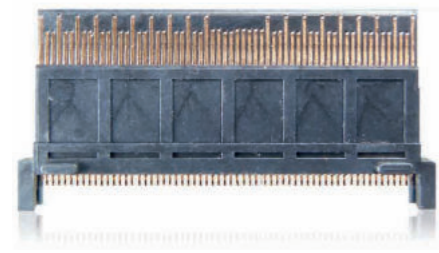
CFP4

CFP2

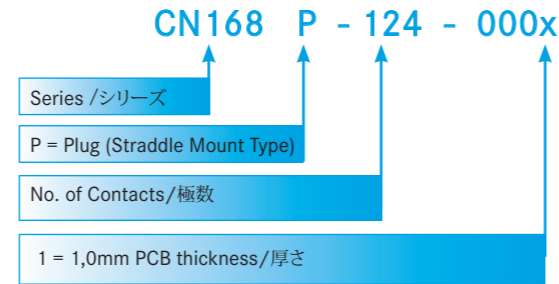
CFP



CFP8 PLUG CONNECTOR



PART NUMBER PLUG



SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: 31.5V AC
- Current Rating/定格電流: DC1.35A
- Contact Resistance/接触抵抗: Max.10m Ω (max.100 mA /max.20mV.)
- Operating Temp. Range/使用温度範囲: -55°C ~85°C
- Mating Cycle/挿抜耐久性: 200 cycles
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tray/トレイ

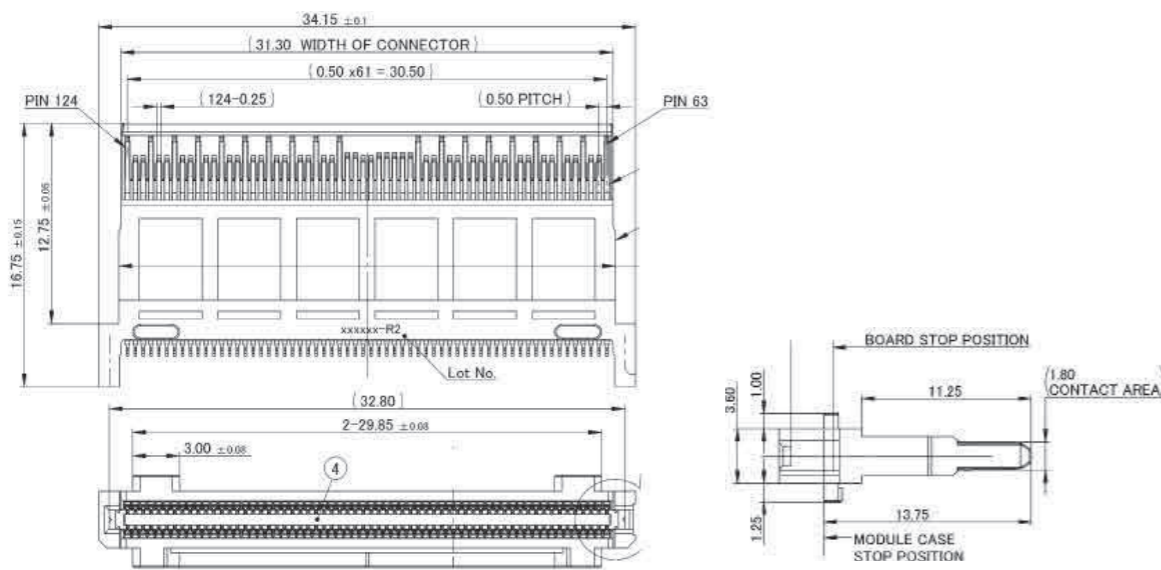
MATERIALS AND FINISH/材料・表面処理

- Insulator/インシュレーター: LCP
- Contact/コンタクト: Copper Alloy, Ni-Au

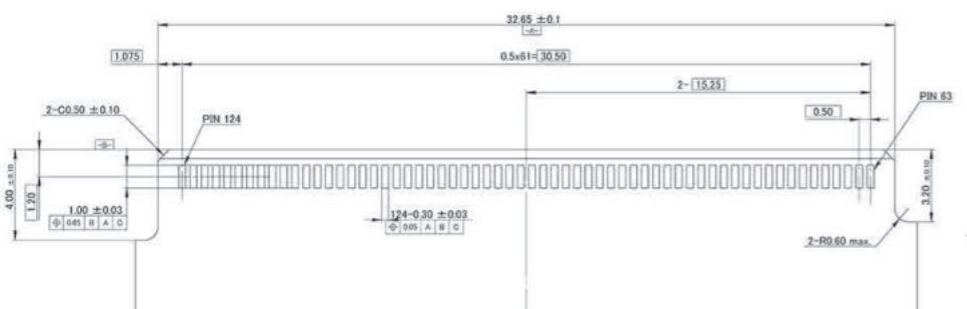
FEATURES特長

- Transmission performance/伝送性能: NRZ 400G (28 Gbps/ch x 16 ch)
- Pitch/コンタクトピッチ: 0.5 mm
- PCB thickness/対応PCBの厚み: 1.0 mm
- Pin count/極数: 124 pins
- Same size with CFP2, but 4x higher performance /CFP2コネクタと同サイズで4倍の伝送性能
- First connector in the world for 400 Gbps Ethernet /400Gbpsに初めて対応したコネクタ
- Complies MSA / MSA準拠
- Complies RoHS/RoHS準拠

OUTLINE DIMENSIONS/外径寸法 CN168P-124-0001 PLUG



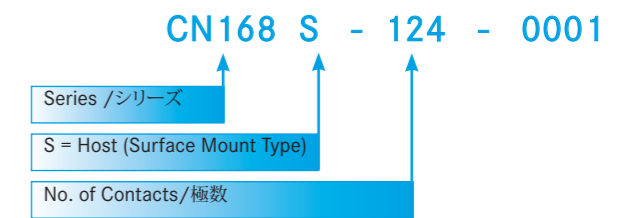
RECOMMENDED PCB LAYOUT/レイアウト



CFP8 HOST CONNECTOR (SMT)



PART NUMBER HOST CONNECTOR



SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: 31.5 V AC
- Current Rating/定格電流: DC1.35A
- Operating Temp. Range/使用温度範囲: -55°C ~85°C
- Contact Resistance/接触抵抗: Max.10m Ω (max.100 mA /max.20mV.)
- Mating Cycle/挿抜耐久性: Max.200 Cycle
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tray/トレイ

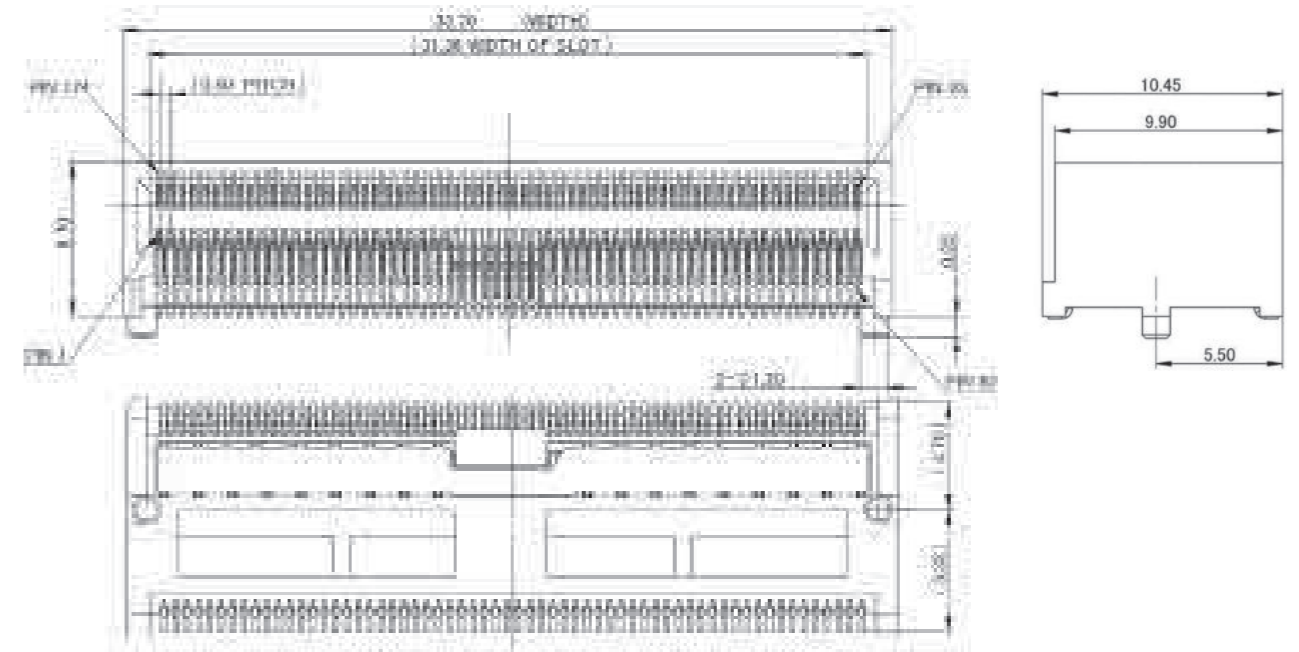
MATERIALS AND FINISH材料・表面処理

- Insulator/インシュレーター: LCP
- Contacts/コンタクト: Copper Alloy, Ni-Au

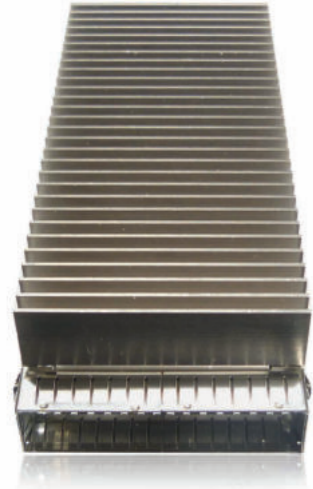
FEATURES特長

- Transmission performance/伝送性能: NRZ 400G (28 Gbps/ch x 16 ch)
- Pitch/コンタクトピッチ: 0.5 mm
- Pin count/極数: 124 pins
- Same size with CFP2, but 4x higher performance /CFP2コネクタと同サイズで4倍の伝送性能
- First connector in the world for 400 Gbps Ethernet /400Gbpsに初めて対応したコネクタ
- Complies MSA / MSA準拠

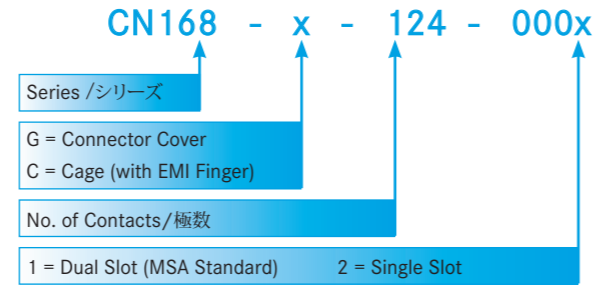
OUTLINE DIMENSIONS/外径寸法 CN168S-124-0001 HOST CONNECTOR



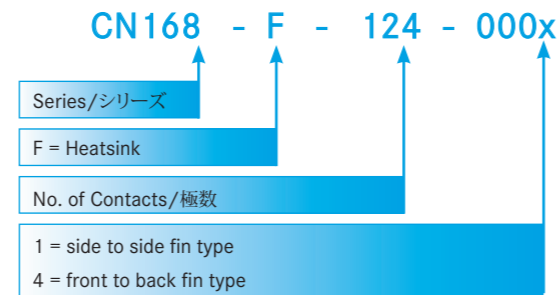
CFP8 MECHANICAL PARTS



PART NUMBER MECHANICAL COMPONENTS



PART NUMBER HEATSINK



SPECIFICATIONS / 仕様

- Operating Temp. Range / 使用温度範囲: -55°C ~ 85°C
- Plug-in Force / 挿入力: Max. 80 N
- Pull-out Force / 抜去力: Max. 80 N
- Durability / 挿抜耐久性: Max 100 cycles
- Test Standard: / 評価条件: EIA-364

MATERIALS AND FINISH / 材料・表面処理

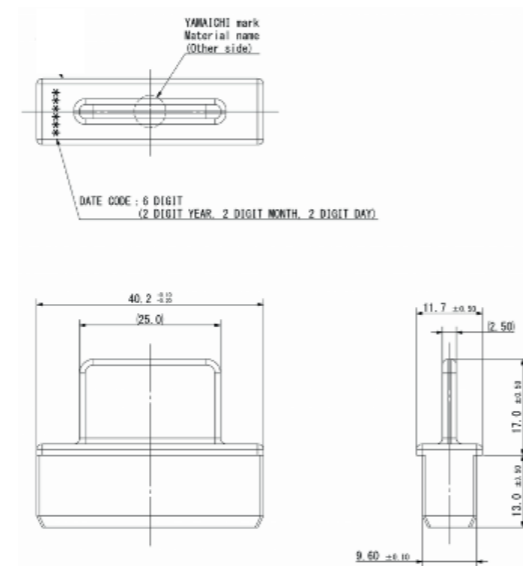
- Cage / ケージ: Stainless Steel, Degreasing
- Connector Cover / コネクタカバー: Zinc Alloy, Cu-Ni
- Gasket / ガasket: Urethane, Silicone
- Screw / ネジ: Stainless Steel
- Heatsink / ヒートシンク: Aluminium

FEATURES / 特長

- Dual slot: MSA standard / MSA標準 (2スロットタイプ)
- Complete kit for dual slot requires / 2スロットタイプメカセット: 1 x dual cage, 1 x dual cover, 2 x heatsink
- Complete kit for single slot requires / 1スロットタイプメカセット: 1 x single cage, 1 x single cover, 1 x heatsink
- Clipless design to fold heatsink / ヒートシンクの固定にクリップを使用しないクリップレスデザイン
- Dust cap available for EMI protection / EMI対応のダストキャップを準備
- Complies RoHS / RoHS準拠

OUTLINE DIMENSIONS / 外径寸法

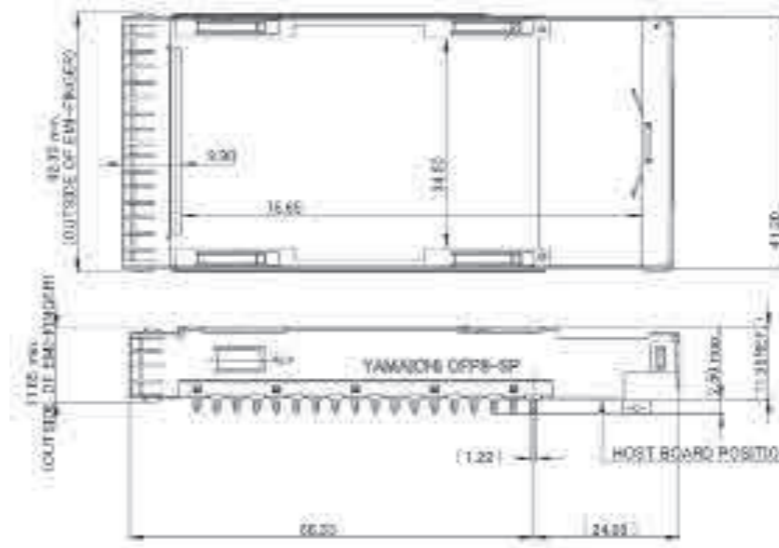
CN168D-124-0002



CFP8 MECHANICAL PARTS

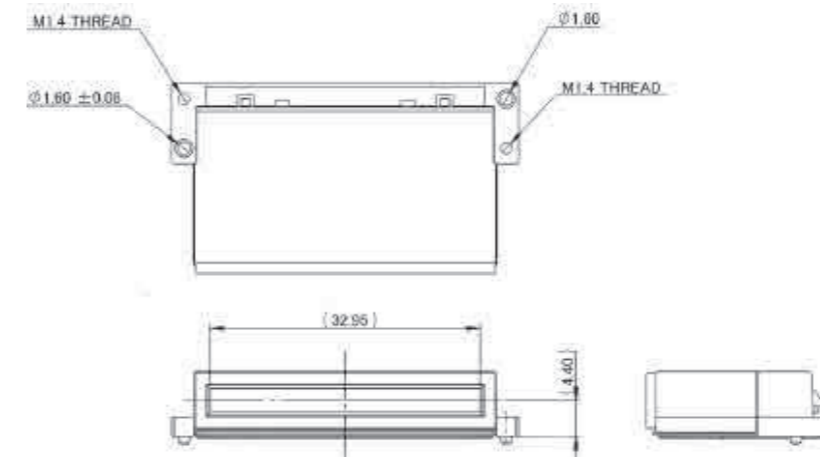
OUTLINE DIMENSIONS / 外径寸法

CN168C - 124 - 0002 CAGE / ケージ



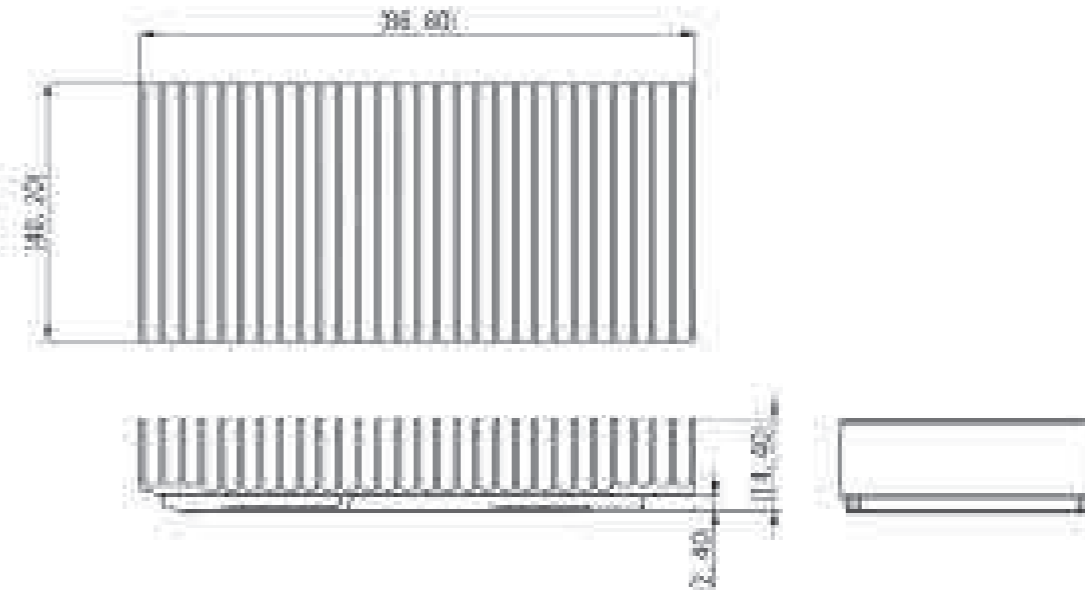
OUTLINE DIMENSIONS / 外径寸法

CN168G - 124 - 0002 COVER / カバー

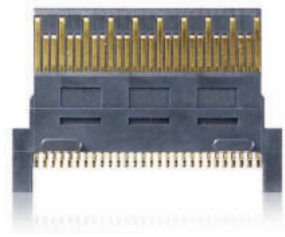


OUTLINE DIMENSIONS / 外径寸法

CN168F - 124 - 0001 HEATSINK / ヒートシンク

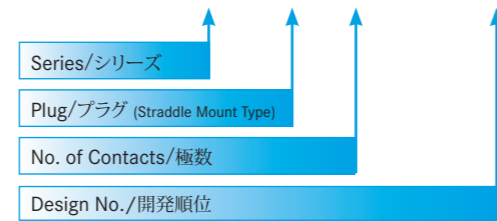


CFP4 PLUG CONNECTOR



PART NUMBER PLUG CONNECTOR

CN121 P - 056 - 000x



SPECIFICATIONS/仕様

- | | |
|---------------------------------|----------------------------|
| • Voltage Rating/定格電圧: | 31.5 VAC |
| • Current Rating/定格電流: | DC 0.8A/line |
| • Contact Resistance/接触抵抗: | Max.10m Ω |
| | (max.100 mA /max. 20 m V.) |
| | -55°C ~85°C |
| • Operating Temp. Range/使用温度範囲: | Max.200cycles |
| • Mating Cycles/挿抜耐久性: | EIA-364 |
| • Test Standard/評価条件: | Tray/トレイ |
| • Packing/梱包: | |

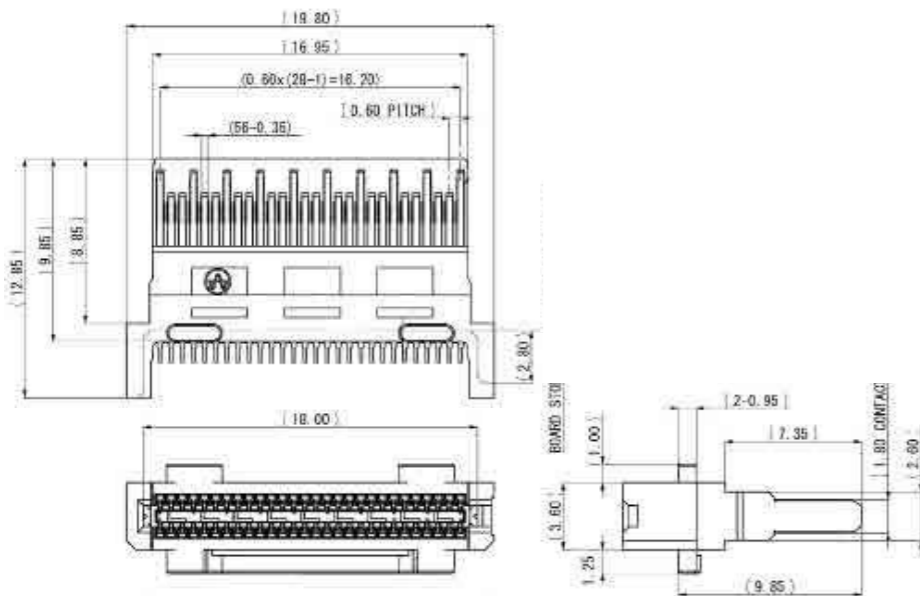
FEATURES/特長

- Transmission performance/伝送性能: NRZ 100G (28 Gbps/ch x 4ch)
- Pitch/コンタクトピッチ: 0.6 mm
- PCB thickness/対応PCBの厚み: 1.0 mm
- Pin count/極数: 56 pins
- Complies MSA and Telcordia / MSAとTelcordia準拠
- Complies RoHS/RoHS準拠

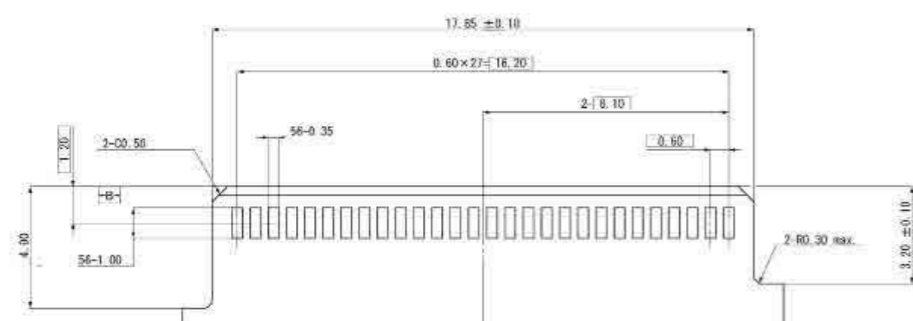
MATERIALS AND FINISH/材料・表面処理

- Insulator/インシュレーター: LCP
- Contacts/コンタクト: Copper Alloy, Ni-Au

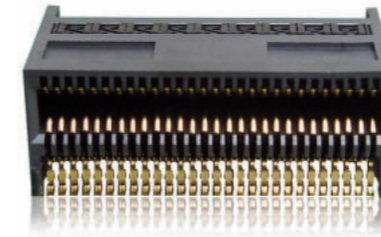
OUTLINE DIMENSIONS/外径寸法 CN121P - 056 - 0004



RECOMMENDED PCB LAYOUT/PCBレイアウト

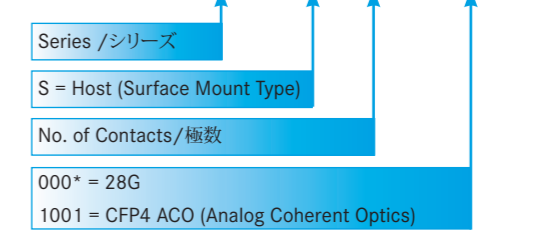


CFP4 HOST CONNECTORS



PART NUMBER HOST CONNECTOR

CN121 S - 056 - *00*



SPECIFICATIONS/仕様

- | | |
|---------------------------------|-------------------------|
| • Voltage Rating/定格電圧: | 31.5 VAC |
| • Current Rating/定格電流: | DC 0.8A/line |
| • Contact Resistance/接触抵抗: | Max.10m Ω |
| | (max.100mA /max. 20mV.) |
| • Operating Temp. Range/使用温度範囲: | -55°C ~85°C |
| • Mating Cycles/挿抜耐久性: | Max.200cycles |
| • Test Standard/評価条件: | EIA-364 |
| • Packing/梱包: | Tray/トレイ |

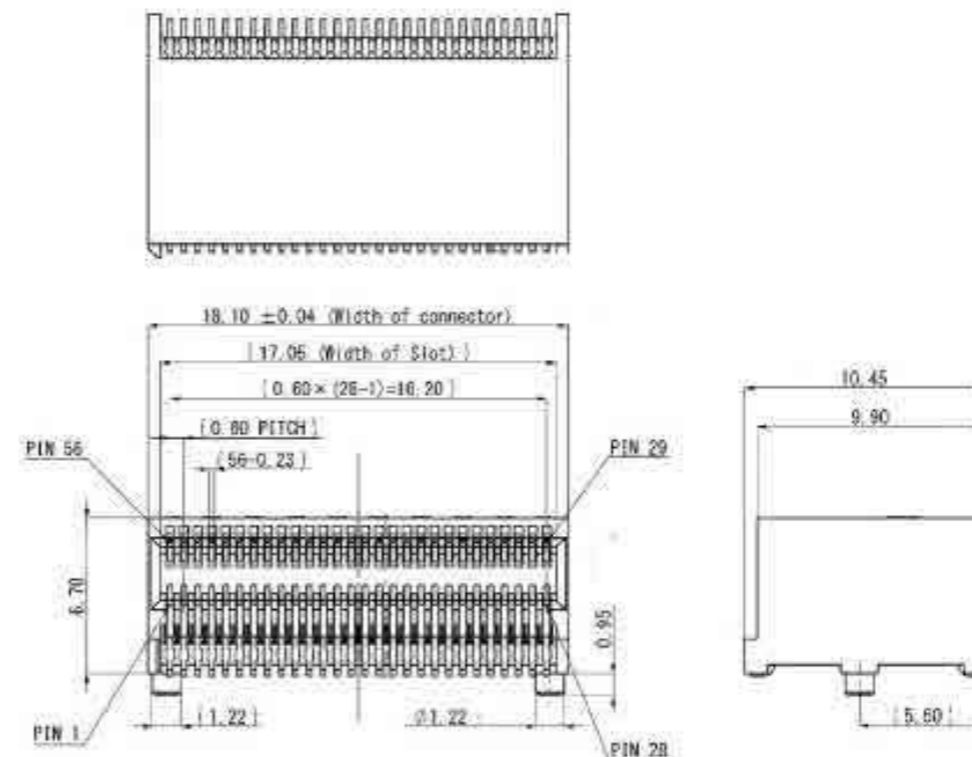
FEATURES/特長

- Transmission performance/伝送性能: NRZ 100G (28 Gbps/ch x 4ch)
NRZ 200G (64Gbps/ch x 4ch)
- Pitch/コンタクトピッチ: 0.6 mm
- Pin count/極数: 56pins
- Complies MSA and Telcordia / MSAとTelcordia準拠
- Complies RoHS/RoHS準拠

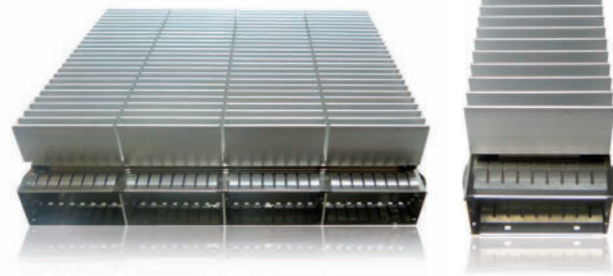
MATERIALS AND FINISH 材料・表面処理

- Insulator/インシュレーター: LCP
- Contacts/コンタクト: Copper Alloy, Ni-Au

OUTLINE DIMENSIONS/外径寸法 CN121S - 056 - 0001

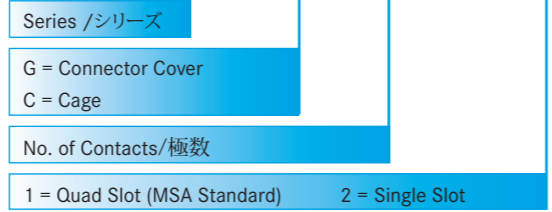


CFP4 MECHANICAL COMPONENTS



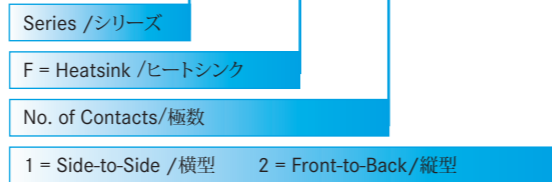
PART NUMBER MECHANICAL COMPONENTS

CN121 - x - 056 - 000x



PART NUMBER HEATSINK

CN121 - F - 056 - 000 x



SPECIFICATIONS/仕様

| | |
|-------------------------------|--------------|
| Operating Temp. Range/使用温度範囲: | -55°C ~ 85°C |
| Plug-in force/挿入力: | Max.50 N |
| Pull-out force/抜去力: | Max.30 N |
| Test Standard/評価条件: | EIA-364 |

MATERIALS AND FINISH/材料・表面処理

| | |
|------------------|--------------------------------|
| Cage: | Stainless Steel, Degreasing |
| Connector Cover: | Zinc Ni-Cu |
| Gasket: | Silicone |
| Screw: | Stainless Steel, Degreasing |
| Heatsink: | Aluminium, Anodizing Treatment |
| ケージ: | ステンレス |
| コネクタカバー: | Zinc Ni-Cu |
| ギャasket: | シリコン |
| スクリュー: | ステンレス |
| ヒートシンク: | アルミニウム、陽極処理 |

FEATURES/特長

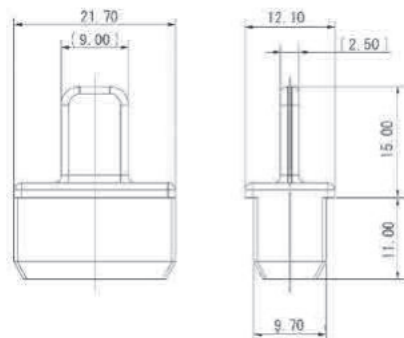
- Quad slot: MSA standard/MSA標準(4スロットタイプ)
- Complete kit for quad slot requires/4スロットタイプメカセット
1 x quad cage, 1 x quad cover, 4 x heatsink
- Complete kit for single slot requires/1スロットタイプメカセット
1 x single cage, 1 x single cover, 1 x heatsink
- Clipless design to fold heatsink
/ヒートシンクの固定にクリップを使用しないクリップレスデザイン
- Press fit tool available for cage/プレスフィット治具を準備
- Dust cap available for EMI protection
/EMI対応のダストキャップを準備
- Complies RoHS/RoHS準拠

PART NUMBER DUST CAP

CN121D - 056 - 0003

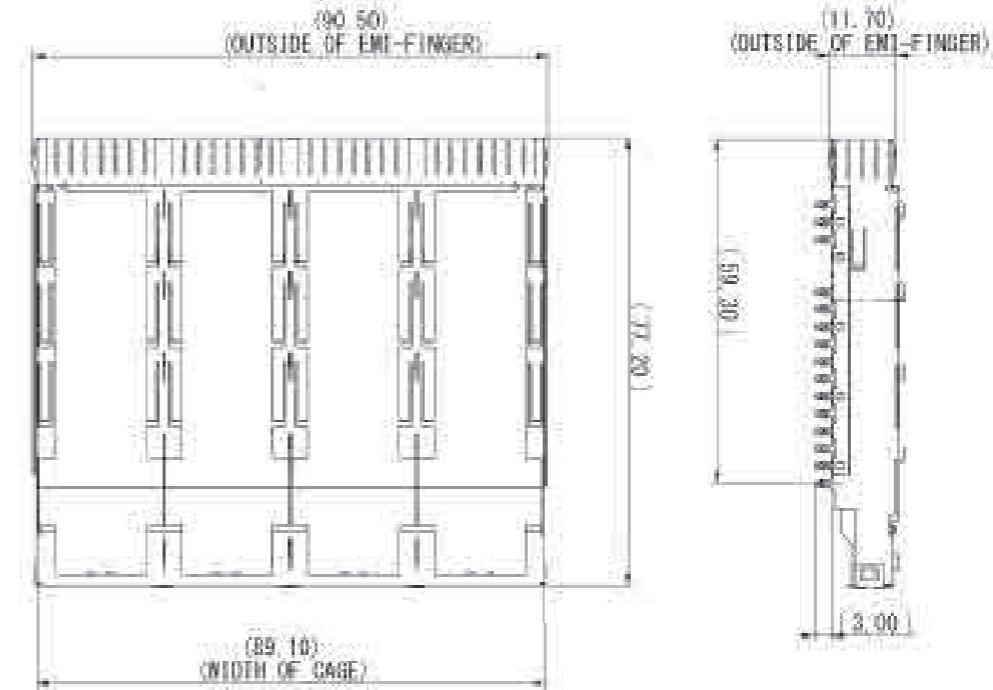


OUTLINE DIMENSIONS / 外径寸法 CN121D-056-0003

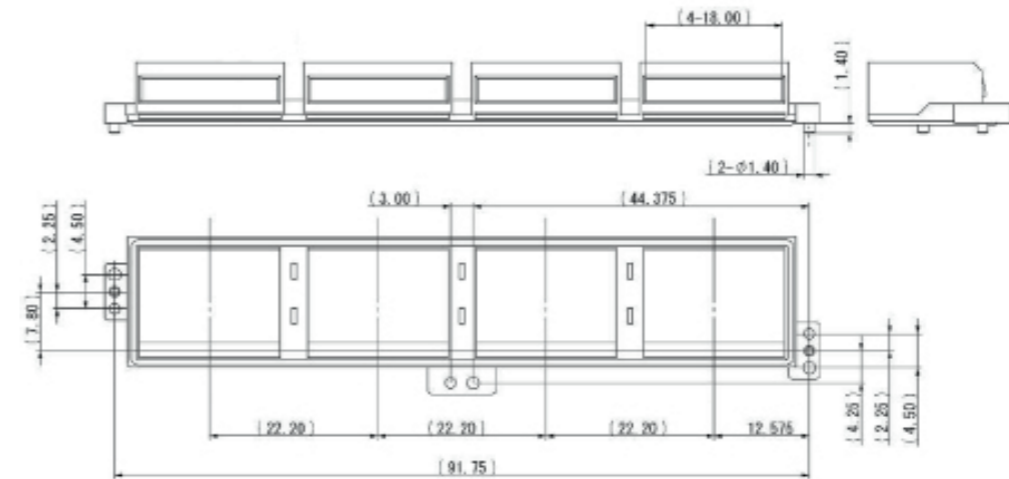


CFP4 MECHANICAL COMPONENTS

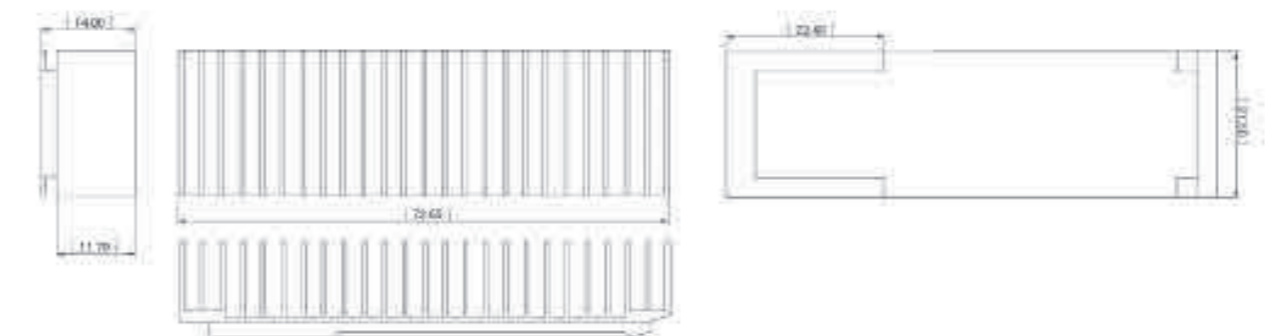
OUTLINE DIMENSIONS/外径寸法 CN121C - 056 - 0001 CAGE/ケージ



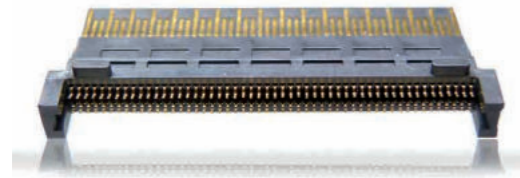
OUTLINE DIMENSIONS/外径寸法 CN121G - 056 - 0001 COVER/カバー



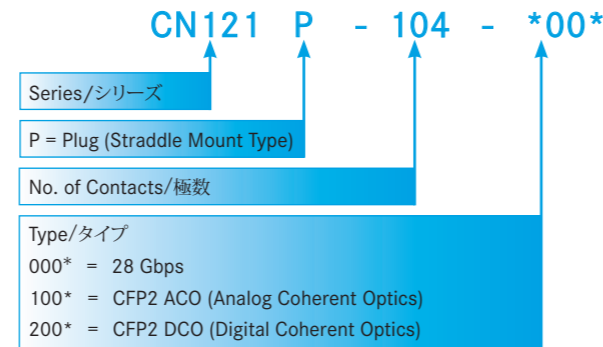
OUTLINE DIMENSIONS / 外径寸法 CN121F - 056 - 0001 HEATSINK/ヒートシンク



CFP2 PLUG CONNECTOR



PART NUMBER PLUG



SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: 31.5 VAC
- Current Rating/定格電流:

| | |
|-----------------|---------|
| CN121P-104-000x | DC1.30A |
| CN121P-104-100x | DC1.45A |
| CN121P-104-200x | DC1.45A |
| CN121P-104-2006 | DC1.56A |
- Contact Resistance/接触抵抗: Max.10m Ω (max.100 mA /max. 20 m V.)
- Operating Temp. Range/使用温度: -55°C ~85°C
- Mating Cycles/挿抜耐久性: Max.200cycles
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tray/トレイ

FEATURES/特長

- Transmission performance/伝送性能:

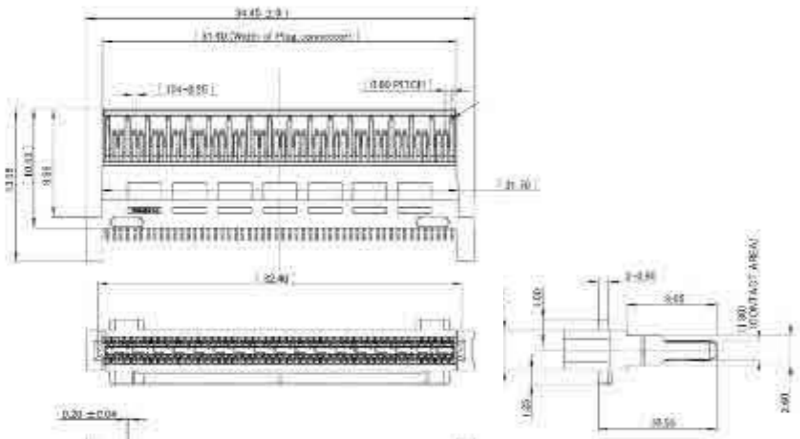
| |
|--------------------------------|
| NRZ 100G (28Gbps/ch x 4ch) |
| NRZ 200G (56Gbps/ch x 4ch) ACO |
| NRZ 200G (64Gbps/ch x 4ch) DCO |
- Pitch/コンタクトピッチ: 0.6 mm
- PCB thickness/対応PCBの厚み: 1.0 mm, 1.6mm and 2.1mm
- Pin count/極数: 104 pins
- Complies MSA and Telcordia / MSAとTelcordia準拠
- Complies RoHS/RoHS準拠

MATERIALS AND FINISH/材料・表面処理

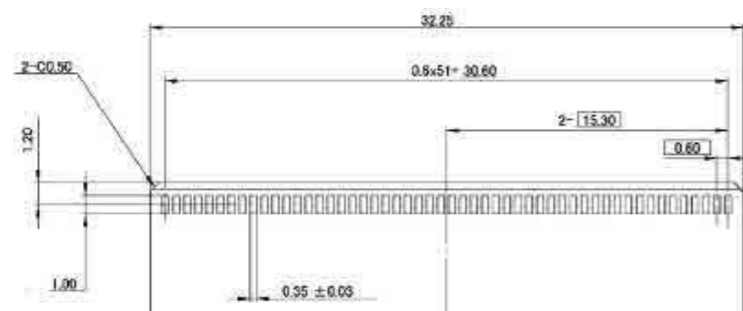
- Insulator/インシュレーター: LCP
- Contacts/コンタクト: Copper Alloy, Ni-Au

OUTLINE DIMENSIONS/外径寸法

CN121P-104-*00*



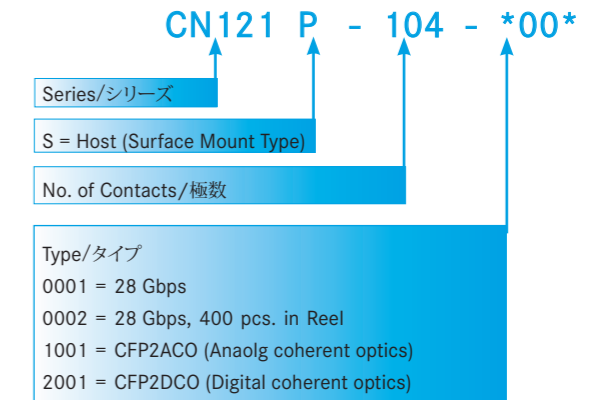
RECOMMENDED PCB LAYOUT/ PCB レイアウト



CFP2 HOST CONNECTOR



PART NUMBER HOST CONNECTOR



SPECIFICATIONS/仕様

- Voltage Rating/定格電圧: 31.5 VAC
- Current Rating/定格電流:

| | |
|-----------------|---------|
| CN121S-104-000x | DC1.3A |
| CN121S-104-100x | DC1.45A |
| CN121S-104-200x | DC1.45A |
| CN121S-104-2002 | DC1.56A |
- Contact Resistance/接触抵抗: Max.10m Ω (max.100 mA /max.20 mV.)
- Operating Temp. Range/使用温度範囲: -55°C ~85°C
- Mating Cycles/挿抜耐久性: Max.200cycles
- Test Standard/評価条件: EIA-364
- Packing/梱包: Tape and Reel/エンボス Tray/トレイ

FEATURES/特長

- Transmission performance/伝送性能:

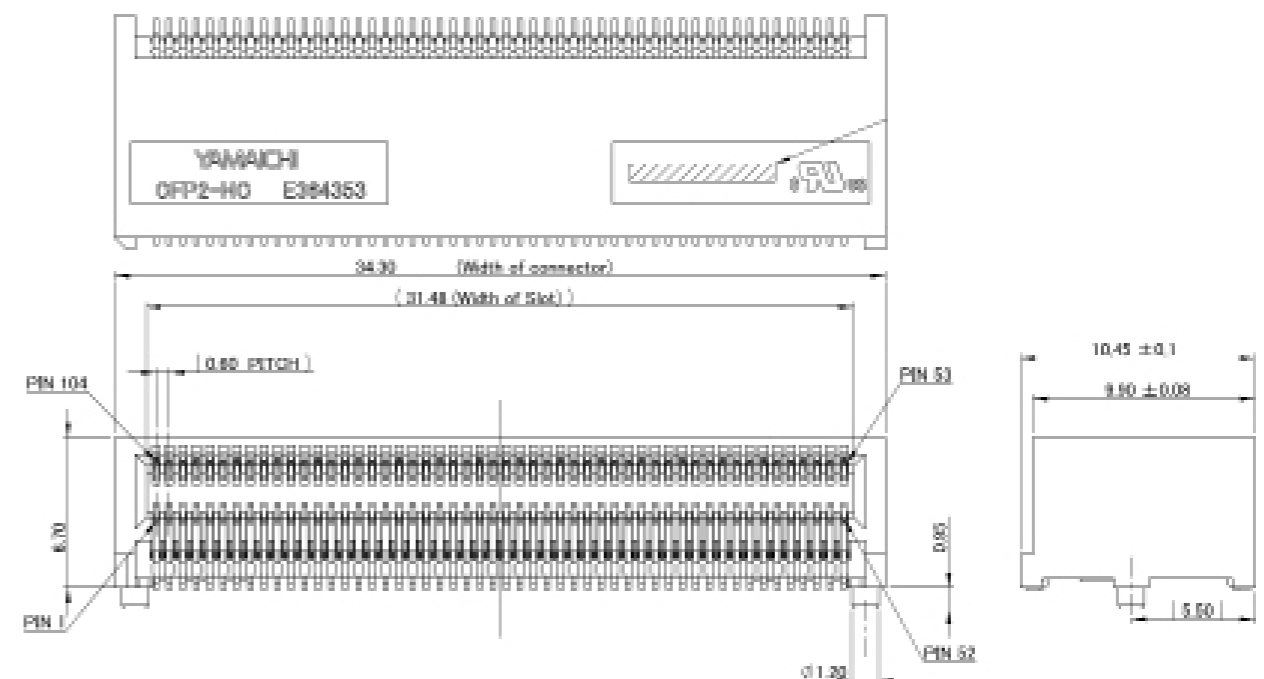
| |
|--------------------------------|
| NRZ 100G (28Gbps/ch x 4ch) |
| NRZ 200G (56Gbps/ch x 4ch) ACO |
| NRZ 200G (64Gbps/ch x 4ch) DCO |
- Pitch/コンタクトピッチ: 0.6 mm
- Pin count/極数: 104 pins
- Complies MSA and Telcordia / MSAとTelcordia準拠
- Complies RoHS/RoHS準拠

MATERIALS AND FINISH/材料・表面処理

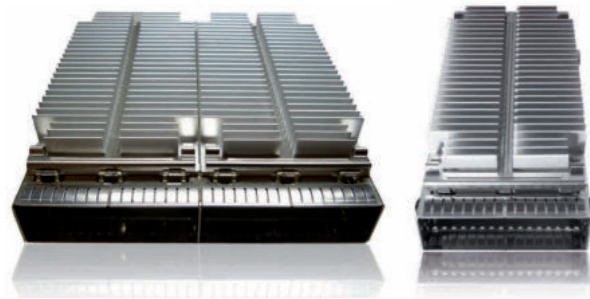
- Insulator/インシュレーター: LCP
- Contacts/コンタクト: Copper Alloy, Ni-Au

OUTLINE DIMENSIONS/外径寸法

CN121S-104-*00*



CFP2 MECHANICAL COMPONENTS



SPECIFICATIONS/仕様

| | |
|-------------------------------|--------------|
| Operating Temp. Range/使用温度範囲: | -55°C ~ 85°C |
| Plug-in Force/挿入力: | Max. 55 N |
| Pull-out Force/抜去力: | min. 15 N |
| Test Standard/評価条件: | EIA-364 |

MATERIALS AND FINISH/材料・表面仕様

| | |
|------------------|--|
| Cage: | Stainless Steel, Degreasing Nickel Silver |
| Connector Cover: | Zinc, Ni-Cu |
| Gasket: | Silicone |
| Screw: | Stainless Steel, Degreasing |
| Heatsink: | Aluminium, Anodizing Treatment |
| Clip: | Stainless Steel, Degreasing |
| Accessories: | LCP (conductive material) |
| ケージ: | ステンレス、銀ニッケル |
| コネクタカバー: | 亜鉛、Ni-Cu |
| ギャasket: | シリコン |
| スクリュー: | ステンレス |
| ヒートシンク: | アルミニウム、陽極処理 |
| クリップ: | ステンレス |
| アクセサリ: | LCP (conductive material) |

FEATURES/特長

- Dual slot: MSA standard/MSA標準(2スロットタイプ)
- Complete kit for dual slot requires/4スロットタイプメカセット
1 x dual cage, 1 x dual cover, 2 x heatsink and 2 x clip
- Complete kit for single slot requires/1スロットタイプメカセット
1x single cage, 1 x single cover, 1 x heatsink and 1 x clip
- Dust cap and Dummy module available for EMI protection
/EMI対応のダストキャップとダミーモジュールを準備
- Complies RoHS/RoHS標準

PART NUMBER MECHANICAL COMPONENTS

CN121 - x - 104 - 000 x

| | |
|---|-----|
| Series /シリーズ | x |
| G = Connector Cover /コネクタカバー C = Cage /ケージ | 104 |
| No. of Contacts /極数 | 000 |
| 1 = Dual Slot / ダブルスロット(MSA Standard) 2 = Single Slot / シングルスロット | x |

PART NUMBER FOR HEATSINK AND CLIP

CN121 - x - 104 - 000 x

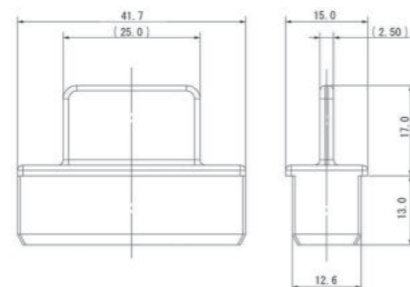
| | |
|--|-----|
| Series /シリーズ | x |
| F = Heatsink /ヒートシンク M = Clip /クリップ | 104 |
| No. of Contacts /極数 | 000 |
| For Heatsink 1 = Side-to-Side / 横型 2 = Front-to-Back / 縦型 For Clip = 8 | x |

PART NUMBER DUMMY MODULE & DUST CAP

CN121D - 104 - 000 x

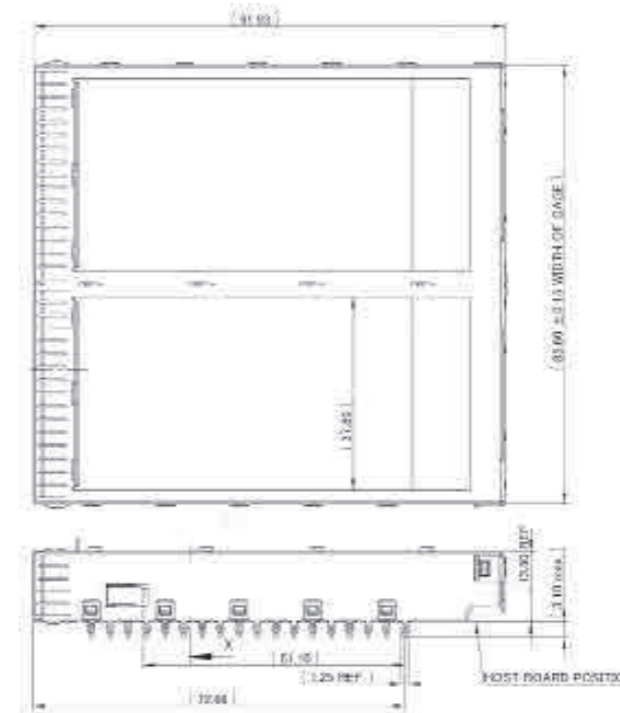
| | |
|---|-----|
| Series /シリーズ | 104 |
| Design No./デザイン番号 | 000 |
| 1 = Dummy Module /ダミーモジュール 2 = Dust Cap /ダストキャップ | x |

OUTLINE DIMENSIONS/外径寸法 CN121D - 104 - 0001

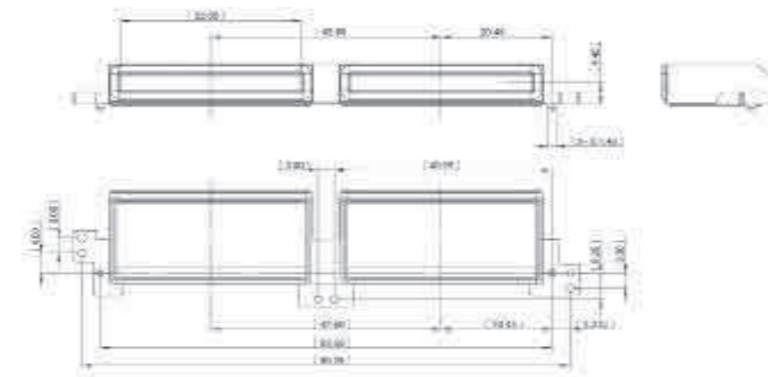


CFP2 MECHANICAL COMPONENTS

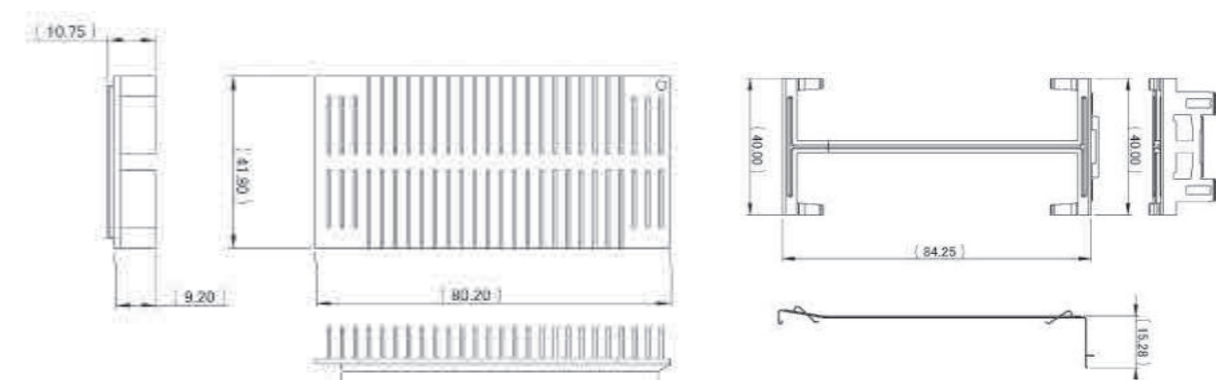
OUTLINE DIMENSIONS/外径寸法 CN121C - 104 - 0001 CAGE/ケージ



OUTLINE DIMENSIONS/外径寸法 CN121G - 104 - 0001 COVER/カバー



OUTLINE DIMENSIONS/外径寸法 CN121F - 104 - 0001 HEATSINK/ヒートシンク AND CN121M - 104 - 0008 CLIP/クリップ



CFP PLUG CONNECTOR



PART NUMBER PLUG

CA009 - P x 0 x - 001

| | | |
|----------------------------|---|-----------------------------|
| Series / シリーズ | ↑ | CA009 |
| Plug (Straddle Mount Type) | ↑ | P |
| Type / タイプ | ↑ | 0 x |
| PCB thickness / 対応PCBの厚み | ↑ | 0 x - 001 |
| | | 0 = 10Gbps/ch 1 = 28Gbps/ch |
| | | 2 = 2.34mm 3 = 1.60mm |

SPECIFICATIONS/仕様

- Voltage Rating / 定格電圧: 120 VAC/CT
- Current Rating / 定格電流: 0.57A DC(+3.3V)
- Contact Resistance / 接触抵抗: Max. 10m Ω (max. 100 mA / max. 20 m V.)
- Operating Temp. Range / 使用温度範囲: -55°C ~ 85°C
- Mating Cycles / 挿抜耐久性: Max. 200 cycles
- Test Standard / 評価条件: EIA-364
- Packing / 梱包: Tray / トレイ

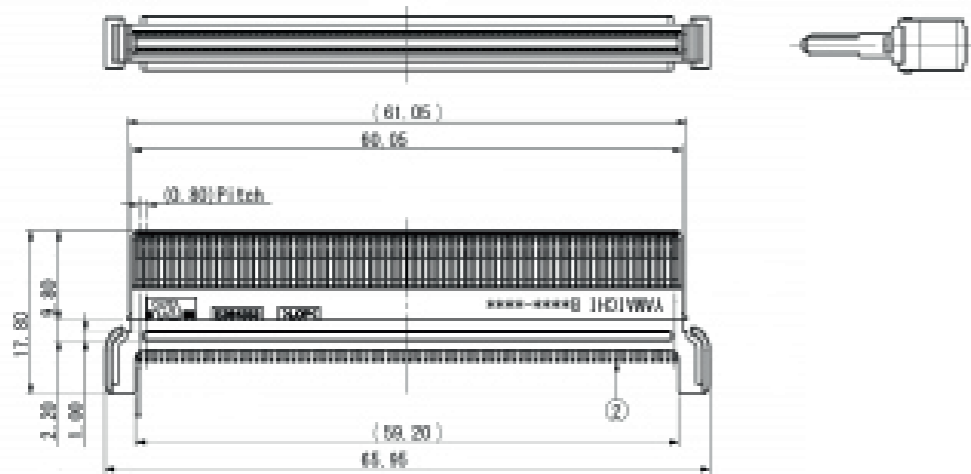
FEATURES/特長

- High-speed transmission / 伝送性能: 10 Gbps/ch and 28Gbps (for 40 Gbps/100 Gbps/200Gbps)
- Pitch / コンタクトピッチ: 0.8 mm
- Pin count / 極数: 148 pins
- Complies MSA and Telcordia / MSA準拠
- Complies RoHS/RoHS準拠

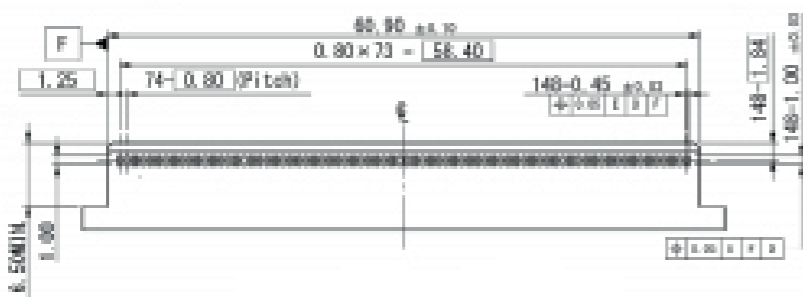
MATERIALS AND FINISH/材料・表面処理

- Insulator / インシュレーター: LCP
- Contacts / コンタクト: Copper Alloy, Ni-Au

OUTLINE DIMENSIONS/外径寸法 CA009 - P003 - 001



RECOMMENDED PCB LAYOUT/PCBレイアウト



CFP HOST CONNECTOR



PART NUMBER HOST CONNECTOR

CA009 - S x 01 - 001

| | | |
|-------------------------------|---|-----------------------------|
| Series / シリーズ | ↑ | CA009 |
| S = Host (Surface Mount Type) | ↑ | S |
| Type / タイプ | ↑ | 01 |
| | | 0 = 10Gbps/ch 1 = 28Gbps/ch |

SPECIFICATIONS/仕様

- Voltage Rating / 定格電圧: 120 VAC/CT
- Current Rating / 定格電流: 0.696A DC(+3.3V)
- Contact Resistance / 接触抵抗: Max. 10m Ω (max. 100 mA / max. 20 mV.)
- Operating Temp. Rang / 使用温度範囲: -55°C ~ 85°C
- Mating Cycles / 挿抜回数: Max 200 cycles
- Test Standard / 評価条件: EIA-364

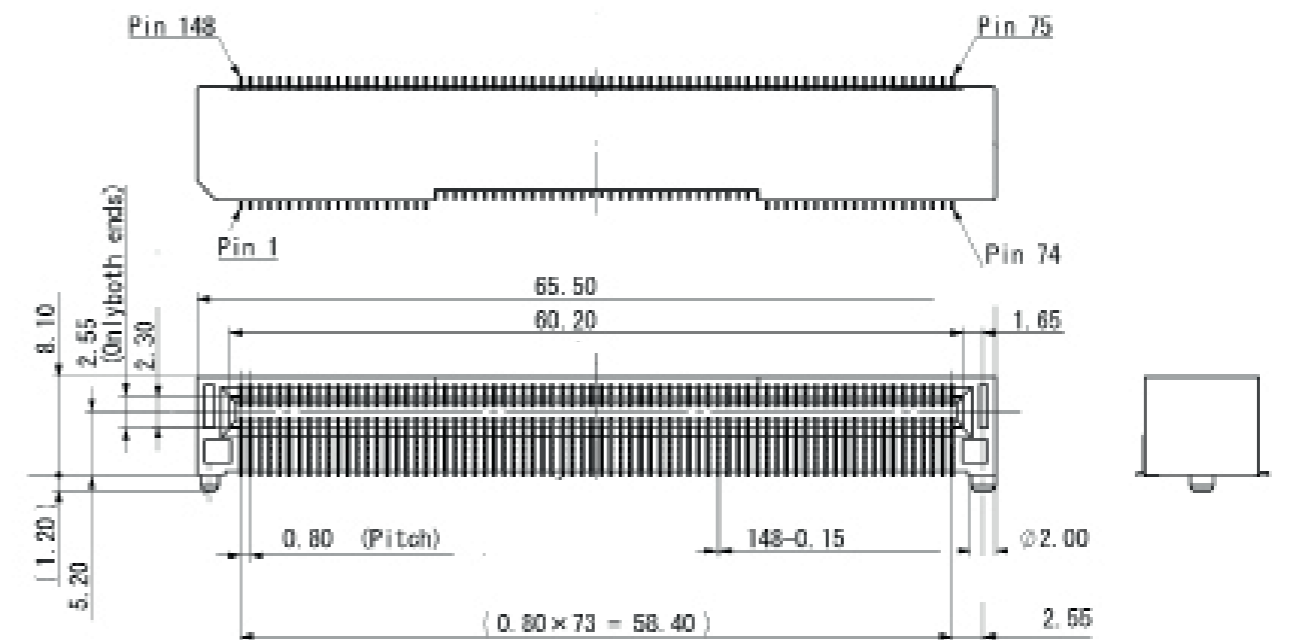
FEATURES/特長

- High-speed transmission / 伝送性能: 10Gbps/ch and 28Gbps (for 40Gbps/100Gbps/200Gbps)
- Pitch / コンタクトピッチ: 0.8 mm
- Pin count / 極数: 148 pins
- Complies MSA and Telcordia / MSA準拠
- Complies RoHS/RoHS準拠

MATERIALS AND FINISH/材料・表面処理

- Insulator / インシュレーター: LCP
- Contacts / コンタクト: Copper Alloy

OUTLINE DIMENSIONS/外径寸法 CA009 - S001 - 001



CFP MECHANICAL COMPONENTS



SPECIFICATIONS/仕様

- Operating Temp. Range/使用温度範囲: -55°C ~ 85°C
- Plug-in Force/挿入力: Max.80 N
- Pull-out Force/抜去力: Max.80 N
- Test Standard/評価条件: EIA-364

MATERIALS AND FINISH/材料・表面処理

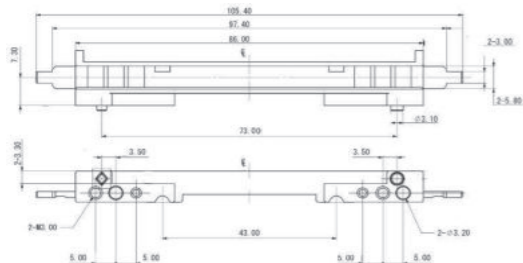
- Cage/ケージ: Stainless Steel
- Guide Rail/ガイドレール: Zinc Alloy Ni
- Connector Cover/コネクタカバー: Zinc Alloy Cu-Ni
- Screw/スクリュー: Stainless
- Backend Plate/バックアッププレート: Zinc Alloy Ni
- External Bracket/エクスターナルブラケット: Zinc Alloy Ni
- Heatsink/ヒートシンク: Aluminium Ni

FEATURES/特長

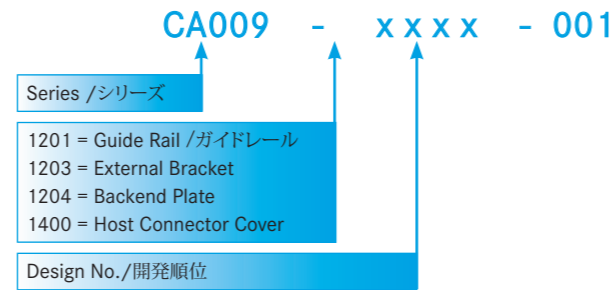
- Complete kit requires /メカセット: 2 x guide rail/ガイドレール, 1 x Connector cover/コネクタカバー, 1 x backend plate/バックアッププレート, 1 x external bracket/エクスターナルブラケット and 1 x heatsink/ヒートシンク:
- Complies MSA /MSA準拠
- Complies RoHS/RoHS準拠

OUTLINE DIMENSIONS/外径寸法

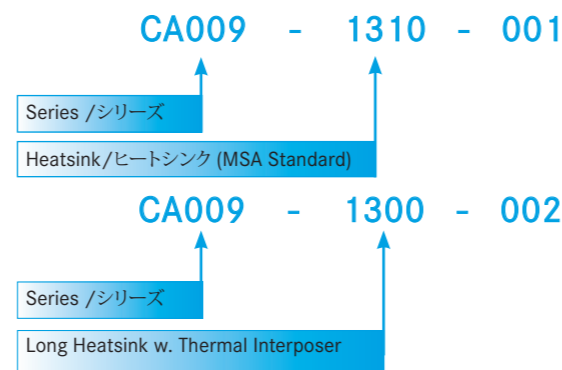
CA009 -1201 - 001
GUIDE RAIL



PART NUMBER MECHANICAL COMPONENTS

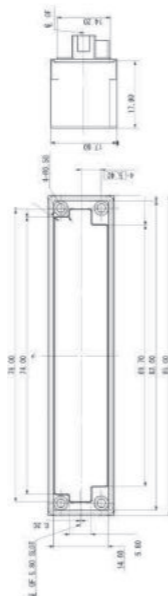


PART NUMBER HEATSINK



OUTLINE DIMENSIONS/外径寸法

CA009 -1203 - 001
EXTERNAL BRACKET



Y-FLEX CABLE

YFLEX is a fully customized flexible circuit cable.

Yamaichi Electronics designed the layout to meet customer-specific requests such as transmission loss, data rate and dimensions. This cable can support the high-speed transmission requirements of the data networking market.

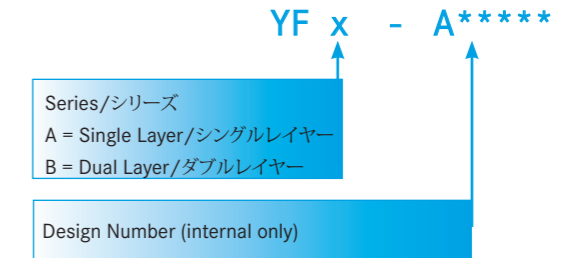
YFLEXは様々なカスタムに対応しております。当製品は高速伝送が必要とされている通信市場でもご利用が可能です。



MATERIALS /材料

- Insulator/インシュレーター: LCP
- Conductive/導体: Copper foil/銅箔
- Bump to connected layers/バンプ: AG paste/銀ペースト
- Cover Layer/レイヤーカバー: Polyimide/ポリイミド(PI)
- Adhesive/粘着性: Epoxy/樹脂

PART NUMBER/製品名称構成

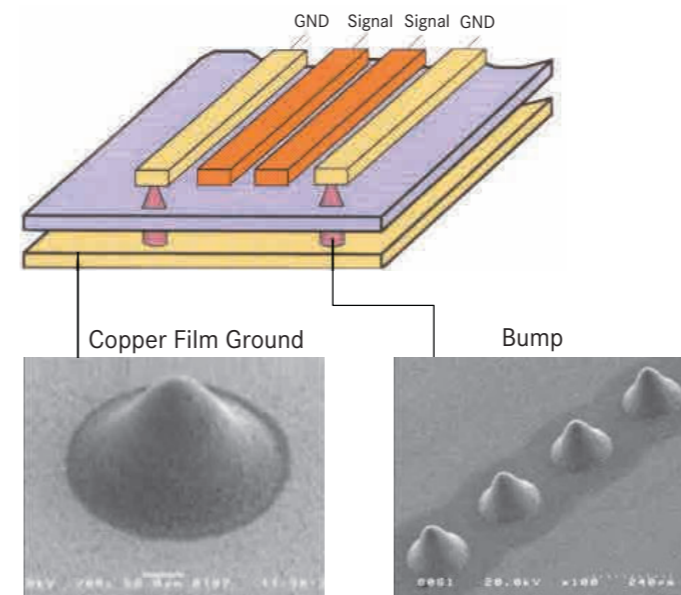


FEATURES/特長

- Available to transmit high-speed in Gbps with low loss /低損失高周波伝送が可能
- Effective in the harshest temperature, humidity and EMI conditions /様々な温度、湿度、EMIの状態に対応可
- Customized depending on layout and requirements/カスタム対応
- Can match differential impedance/他のインピーダンスと接続可能
- RoHS2011/65/EU

HIGH-SPEED TRANSMISSION STRUCTURE/伝送性能構造

- LCP achieves transmission with low dielectric loss /LCPは低誘電損失特性を持つ
- GND and copper film ground are connected with silver bumps which also protect from EMI /導電性Bumpを介してGNDガードを形成しEMI耐性強化



HEAD OFFICE

YAMAICHI ELECTRONICS CO., LTD,

<http://yamaichi.co.jp>
Technoport Taiju Seimei Bldg, 2-16-2, Minamikamata
Ota-ku, Tokyo 144-8581 Japan
Tel: +86 -3734-0110

CONTACT

Yamaichi Electronics Co., Ltd, CS Business promotion Gr,
<http://yamaichi.co.jp>
Tel: 03-6715-8944

SALES OFFICE

YAMAICHI ELECTRONICS DEUTSCHLAND GMBH

<http://www.yamaichi.de>
Concor park, Sahnhofstrasse 20,
85609 Aschheim-Domach, Germany
Tel: +49-89-45109-0

YAMAICHI ELECTRONICS U.S.A., INC

<http://www.yeu.com>
475 Holger Wey, San Jose, CA 95134 USA
Tel: +1-408-715-9100

YAMAICHI ELECTRONICS HONG KONG LTD,

<http://www.yamaichi.com.cn/hk>
Unit 815-16, 8F Tower 1, Grand Central Plaza, 138 Shatin Rural
Committee Road, Shatin, NT., Hong Kong
Tel: +852-2687-1968

YAMAICHI ELECTRONICS SHANGHAI CO., LTD,

<http://www.yamaichi.com.cn/sh>
Room E404 Sun Plaza, No.88 Xiaxia Road,
Chngning Distict, Shanghai 200336 P.R.C
Tel: +86-21-63611231

ASIA YAMAICHI ELECTRONICS INC, SEOUL OFFICE

<http://www.yamaichi.co.kr>
A-604, Woollm Lions Valley, 168, Gasan Digital 1-Ro,
Geumcheon-Gu, Seoji, 08507 Korea
Tel: +82-2-557-0522

YAMAICHI ELECTRONICS SINGAPORE PTE.LTD,

<http://www.yamaichi.com.sg>
72 Bendemeer Road, #04-21 Luzerne, Singapore
339941
Tel: +65-6297-8312

本社

山一電機株式会社

<http://yamaichi.co.jp>
〒144-8566
東京都大田区南蒲田2-16-2テクノポート大樹生命ビル6F
Tel: 03-3734-0100 (代表)

問合せ先

コネクタソリューション事業部 CS事業推進グループ
<http://yamaichi.co.jp>
Tel: 03-6715-8944

国内営業所

大阪営業所

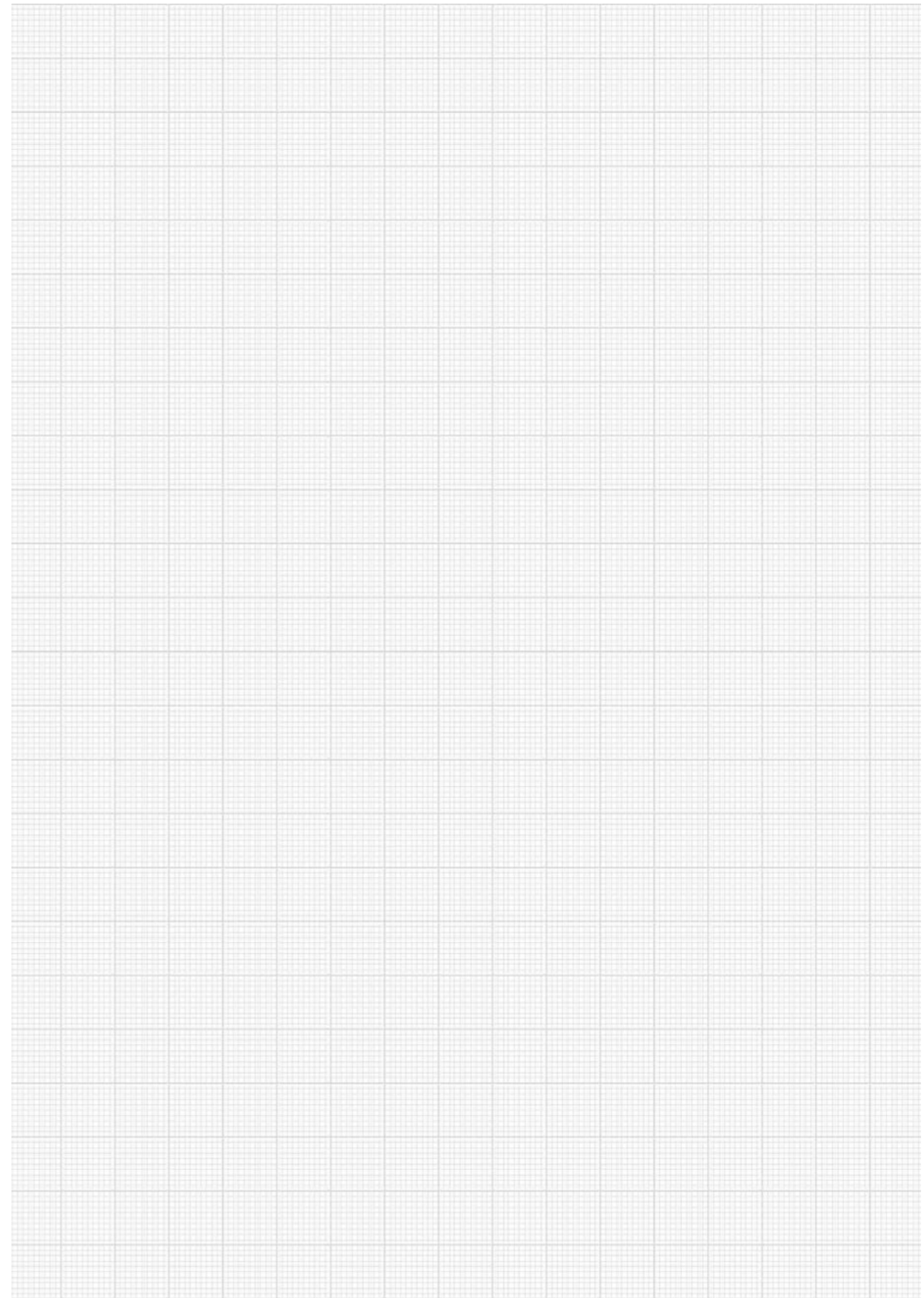
<http://yamaichi.co.jp>
〒532-0033 大阪府大阪市淀川区宮原4-5-36
セントラル新大阪ビル9F
Tel: 06-6396-6191

名古屋営業所

<http://yamaichi.co.jp>
〒464-0075 名古屋市千種区内山3-10-17
今池セントラルビル9F
Tel: 052-745-3818

熊本営業所

<http://yamaichi.co.jp>
〒860-0644 熊本県熊本市中央区水道町5-21
小杉不動産水道町ビル8F
Tel: 096-323-5800





HIGH-SPEED DATA NETWORKING SOLUTIONS

Version 2020

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