

USB Type-C Pin Assignments			
Pin	Signal Name	Pin	Signal Name
A1	GND	B12	GND
A2	SSTXp1	B11	SSRXp1
A3	SSTXn1	B10	SSRXn1
A4	Vbus	B9	Vbus
A5	CC1	B8	SBU2
A6	DP1	B7	DN2
A7	DN1	B6	DP2
A8	SBU1	B5	CC2
A9	Vbus	B4	Vbus
A10	SSRXn2	B3	SSTXn2
A11	SSRXp2	B2	SSTXp2
A12	GND	B1	GND

Part Number	Gold Plating
KUSBX-SMT-CS-4-BK-TR	Flash
KUSBX-SMT-CS-4-BK-30TR	30u"

**Materials and Finish**

Insulator: High Temp.,  
UL94V-0 Rated, Halogen Free,  
Color: Black

Contact Material:  
Copper Alloy

Contact Plating:  
Standard Option (Blank):  
Gold Flash Plated in Contact Area

30 Option:  
30u" Gold Plated in Contact Area

Tin Plated in Solder Area  
With 50u" Nickel Under-plate

Shield: Stainless Steel,  
50u" Nickel Plated

**Electrical Specifications**

Current Rating:  
5.0A Collectively For Pins:  
A4, A9, B4, and B9 (VBUS)

5.0A Collectively For Pins:  
A1, A12, B1, and B12 (GND)

1.25A For Pin B5 (VCONN)

0.25A For All Other Pins

Rated Voltage: 30V

Contact Resistance:  
40 Milliohms Max.

Insulation Resistance:  
100 Megohms Min.

Dielectric Withstanding Voltage:  
100V AC RMS For 1 Minute.

**Mechanical Specifications**

Insertion Force: 5N - 20N

Extraction Force: 8N - 20N  
(6N - 20N After 10,000 Cycles)

Durability: 10,000 Cycles

Operating Temperature:  
-55°C to 85°C



Tolerances
X.X ± 0.30
X.XX ± 0.25
Unless Stated Otherwise

REV.	DATE	DESCRIPTION	REV. BY	CHK. BY	DRAWN BY	DATE
A0.1	05/23/22	New Drawing	C. Kelleher	C. Furumasu	C. Kelleher	05/19/22
A0.2	06/07/22	Extraction Durability	C. Kelleher	C. Furumasu		
A1	09/27/22	Release Drawing	C. Kelleher	C. Furumasu		
A2	03/09/23	Update Description	C. Kelleher	C. Furumasu		

**KUSBX-SMT-CS-4-BK-xxTR**  
("xx" = Contact Plating Option)

USB 4, Type C Socket, SMT, Gold Plated,  
Black, T&R Packaging, RoHS, Halogen Free



### Materials and Finish

Housing: High Temp Thermoplastic  
 UL 94V-0 Rated, Black Color  
 Shield: Stainless Steel, Nickel Plated  
 Contact Material:  
 Copper Alloy  
 Contact plating:  
 30u" Gold Plated on Contact Area,  
 Tin Plated on Solder Tails,  
 All over Nickel Underplate

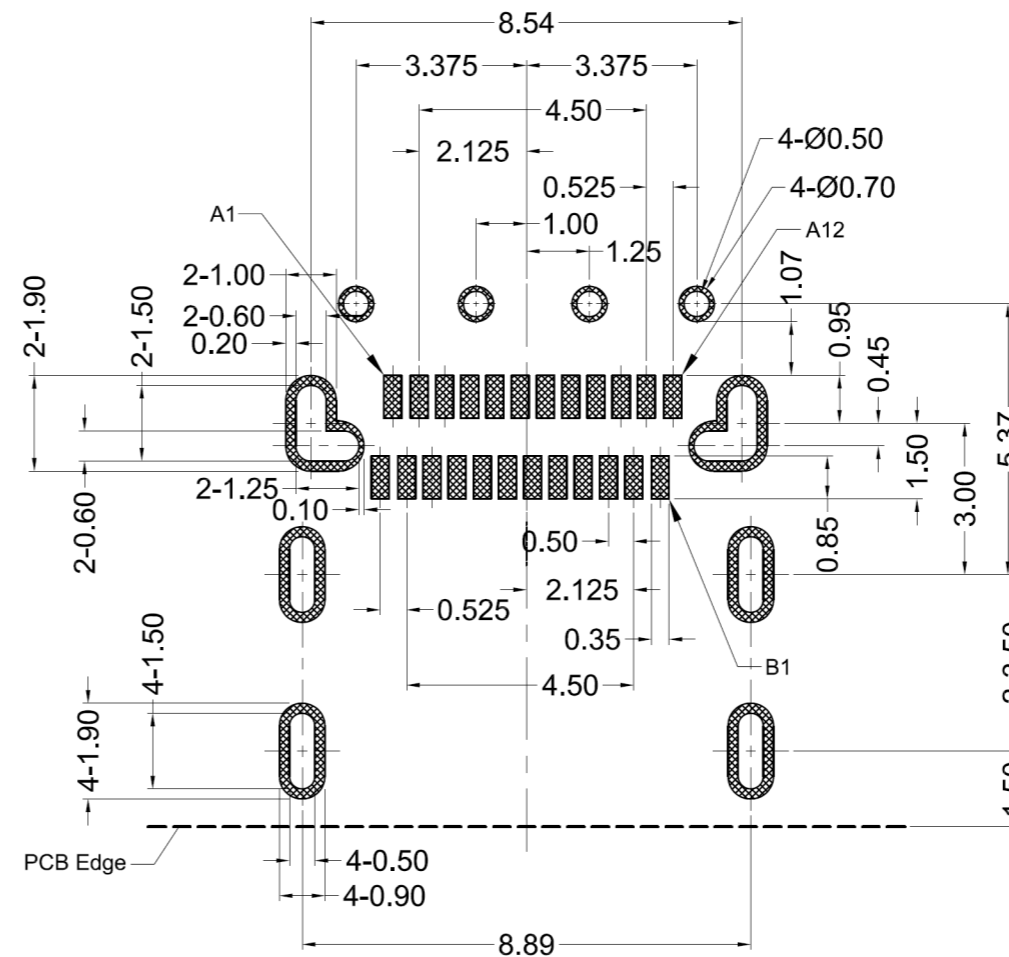
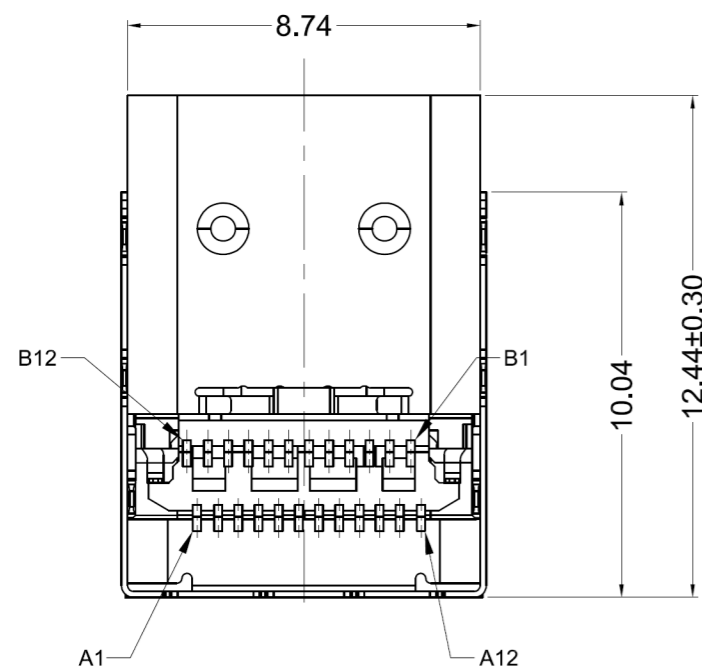
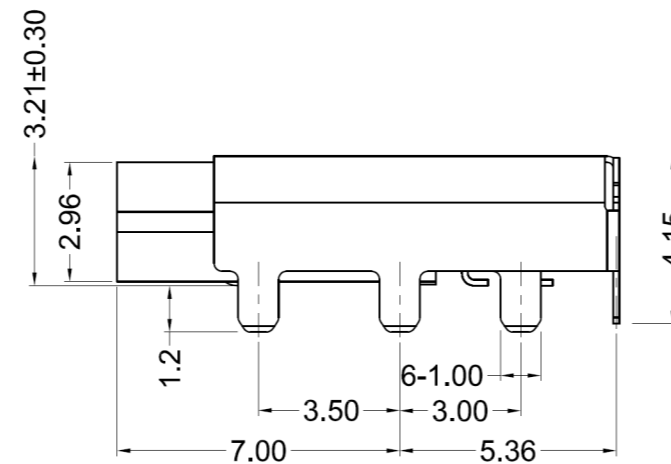
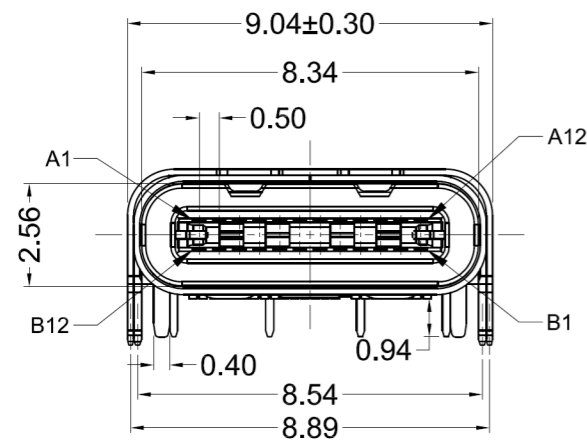
### Electrical Characteristics

Rated Current:  
 5.0A Inclusive (1.25A Ea.) For Pins  
 A4, A9, B4, and B9 (VBUS)  
 1.25A For pin A5 or B5 (VCONN)  
 6.25A Inclusive For Pins  
 A1, A12, B1, and B12 (GND)  
 0.25A For All Other Pins

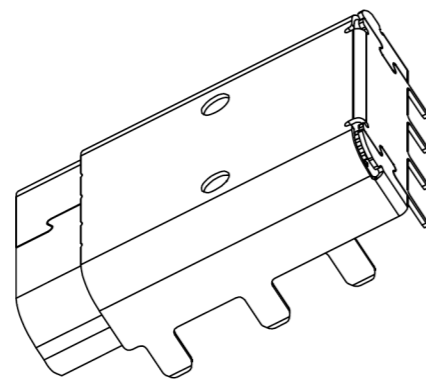
Rated Voltage: 20V  
 Insulation Resistance:  
 100 Megohms Min. at 250V DC  
 Contact Resistance:  
 50 milliohms Max.  
 Dielectric Withstanding Voltage:  
 100V AC RMS for 1 Minute  
 USB Version: 3.1 Gen2 (10Gbps)

### Mechanical Characteristics

Insertion Force: 0.4kg - 3.0kg  
 Withdrawal Force: 0.3kg - 3.0kg  
 Durability: 10000 Mating Cycles Min.  
 Operating Temperature:  
 -40°C to +85°C



Recommended PCB Layout  
 (Top View)



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#### Tolerances

X.X ± 0.30  
 X.XX ± 0.20  
 Unless Stated  
 Otherwise

REV.	DATE	DESCRIPTION	REV. BY	CHK. BY	DRAWN BY	DATE
A0	11/11/15	New Drawing	W. Cook	H. MA	W. Cook	08/24/15
A1	11/11/15	Release Drawing	W. Cook	H. MA	W. Cook	08/24/15
A2	04/11/16	Update Specs	C. Kelleher	W. Cook	W. Cook	
A3	11/03/16	Add PCB Dimensions	C. Kelleher	W. Cook	W. Cook	
A4	11/07/18	ECO #18-058	G. Serrato	D. Shehan	W. Cook	

KUSBX-SMT-CS4-B30TR

USB Type-C, All SMT Contacts

High Temp, RoHS Compliant

