

date 08/23/2023

page 1 of 6

## MODEL: UJ20-C-V-SMT-TR-68 | DESCRIPTION: USB RECEPTACLE

#### **FEATURES**

- USB Type C receptacle
- IP68
- USB 2.0
- o-ring accessory
- tape & reel packaging







#### **SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
USB standard	USB 2.0				
rated input voltage				20	Vdc
rated input current	as per EIA-364-70, Method B power pins collectively (A1, A4, A9, A12, B1, B4, B9, B12) VCONN pins individually (A5, B5) all other signal pins individually			5.0 1.25 0.25	A A A
contact resistance <sup>1</sup>	between terminals and mating plug			40	mΩ
insulation resistance	between adjacent contacts	100			MΩ
voltage withstand	between adjacent contacts	100			Vac
insertion force		5		20	N
withdrawal force		8		20	N
life			10,000		cycles
operating temperature		-40		85	°C
flammability rating	UL94V-0				
RoHS	yes				
IP level	IP68				

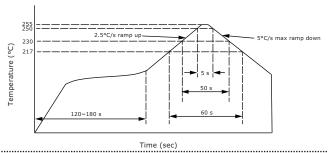
Note:

Note:

#### **SOLDERABILITY**

parameter	conditions/description	min	typ	max	units
reel storage	at relative humidity 65~70%	25		30	°C
reflow soldering <sup>3</sup>	see reflow profile		255	260	°C

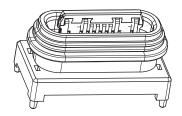
3. It is recommended to reflow solder within 3 months from opening vacuum packaging at a temperature of 25-30°C & relative humidity 65-70%.



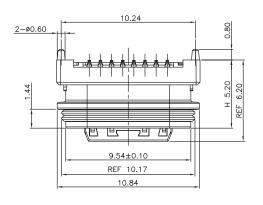
<sup>1.</sup> When measured at 20 mV / 100 mA.
2. All specifications measured at 10-35°C, humidity at 45-85%, under standard atmospheric pressure, unless otherwise noted.

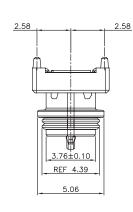
### **MECHANICAL DRAWING**

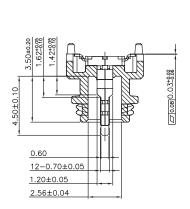
units: mm tolerance: X ±0.50 mm X.X ±0.30 mm X.XX ±0.20 mm X.XXX ±0.100 mm unless otherwise specified



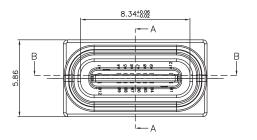
DESCRIPTION	MATERIAL	PLATING/COLOR	
insulator	LCP (UL94V-0)	black	
contact	copper alloy t=0.15 mm	contact area: gold flash over tin-nickel solder area: tin over nickel	
shell	stainless steel t=0.25 mm	nickel	
o-ring	silicone	black	

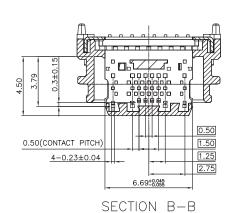


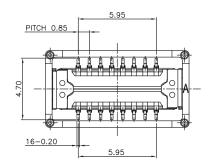




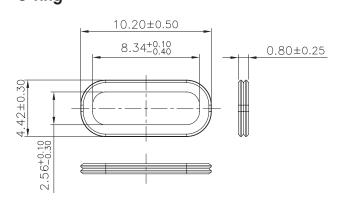
SECTION A-A











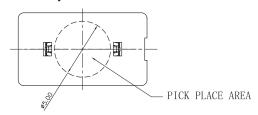
# **MECHANICAL DRAWING (CONTINUED)**

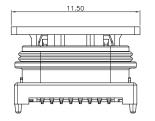
units: mm

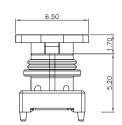
PCB tolerance: ±0.05 mm

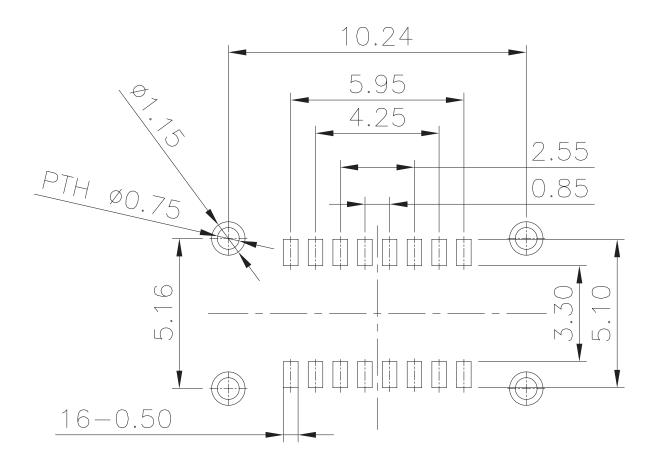
	PIN CONNECTIONS					
PIN	SIGNAL NAME	MATING SEQUENCE	PIN	SIGNAL NAME	MATING SEQUENCE	
A1	GND	FIRST	B12	GND	FIRST	
A4	Vaus	FIRST	B9	Vaus	FIRST	
A5	CC1	SECOND	88	SBU2	SECOND	
A6	Dp1	SECOND	В7	Dn2	SECOND	
A7	Dn1	SECOND	B6	Dp2	SECOND	
A8	SBU1	SECOND	B5	CC2	SECOND	
A9	Vaus	FIRST	В4	Vaus	FIRST	
A12	GND	FIRST	B1	GND	FIRST	
SHELL		GND	SHELL		GND	

### with cap



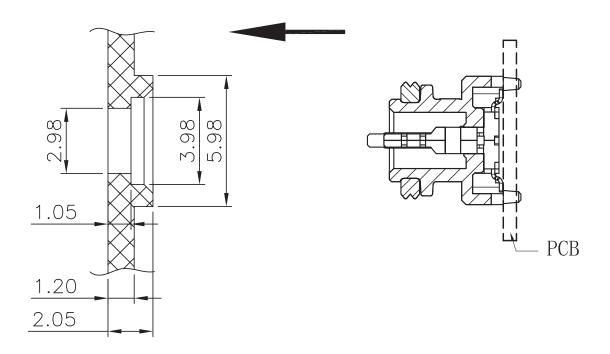


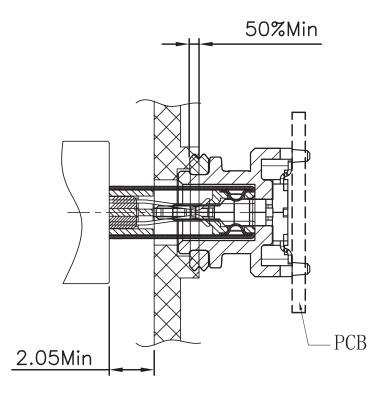




Recommended PCB Layout Top View

# **ASSEMBLY REFERENCE**



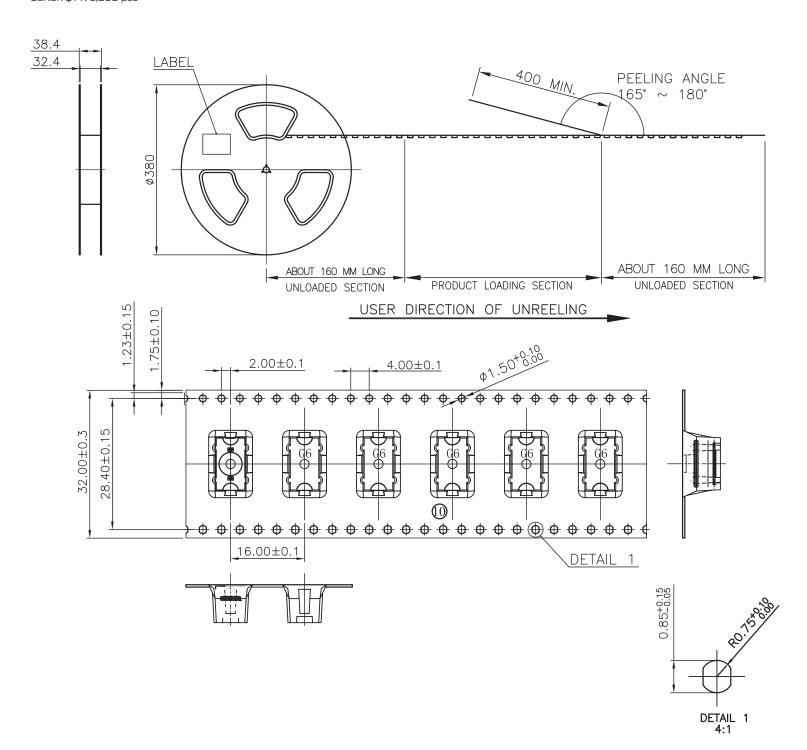


### **PACKAGING**

units: mm

Reel Size: Ø380 mm Reel QTY: 650 pcs per reel Carton Size: 405 x 405 x 330 mm

Carton QTY: 5,200 pcs



Additional Resources: Product Page | 3D Model

CUI DEVICES | MODEL: UJ20-C-V-SMT-TR-68 | DESCRIPTION: USB RECEPTACLE

date 08/23/2023 | page 6 of 6

#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	08/23/2023

The revision history provided is for informational purposes only and is believed to be accurate.



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