# **CUI** DEVICES

**date** 02/05/2020

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MODEL: UJ31-CH-G2-SMT-TR | DESCRIPTION: USB RECEPTACLE

### **FEATURES**

- USB Type C receptacle
- USB 3.1
- 10 Gbit/s data transfer speed
- reflow solder compatible
- tape & reel packaging





### **SPECIFICATIONS**

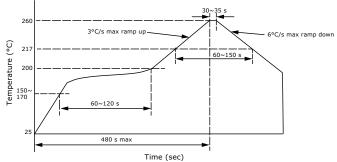
parameter	conditions/description	min	typ	max	units
rated input voltage				20	Vdc
rated input current	as per EIA-364-70, Method B power pins collectively (A4, A9, B4, B9) GND pins collectively (A1, A12, B1, B12) VCONN pins individually (A5, B5) all other signal pins individually			5.0 6.25 1.25 0.25	A A A
contact resistance <sup>1</sup>	between terminals and mating plug			40	mΩ
insulation resistance	at 100 Vdc for 1 minute between adjacent contacts	100			MΩ
voltage withstand	at 60 Hz for 1 minute between adjacent contacts			100	Vac
insertion force	at a rate of 12.5 mm/min	5		20	N
withdrawal force	at a rate of 12.5 mm/min	8		20	N
life	at a rate of 200 max cycles per hour		10,000		cycles
operating temperature		-25		80	°C
storage temperature		-40		85	°C
flammability rating	UL94V-0				
RoHS	yes				

Note: 1. When measured at 20 mV max / 100 mA.

## **SOLDERABILITY**

parameter	conditions/description	min	typ	max	units
reel storage	at relative humidity <60%			30	°C
reflow soldering <sup>2</sup>	see reflow profile	255	260	265	°C

Note: 2. It is recommended to reflow solder within 168 hours from opening vacuum packaging at a temperature <30°C & relative humidity <60%.

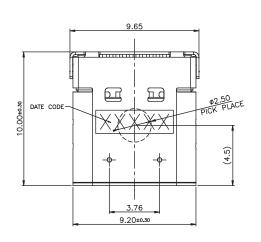


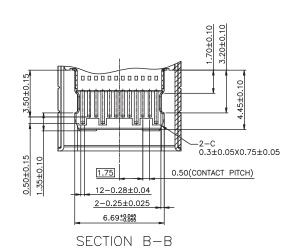
## **MECHANICAL DRAWING**

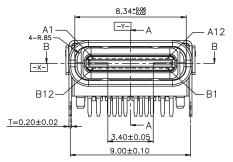
units: mm tolerance: X.X ±0.2 mm X.XX ±0.15 mm

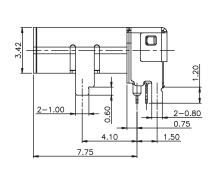


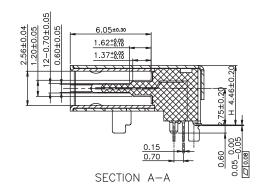
	MATERIAL	PLATING
contact terminals	copper alloy	contact: gold flash solder: matte tin
shell	stainless steel	nickel
cover shell	stainless steel	nickel
inner ground cover shell	stainless steel	
mid plate	stainless steel	
insulator	LCP	

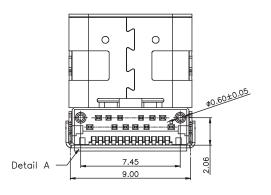


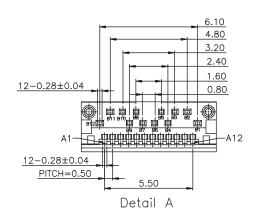








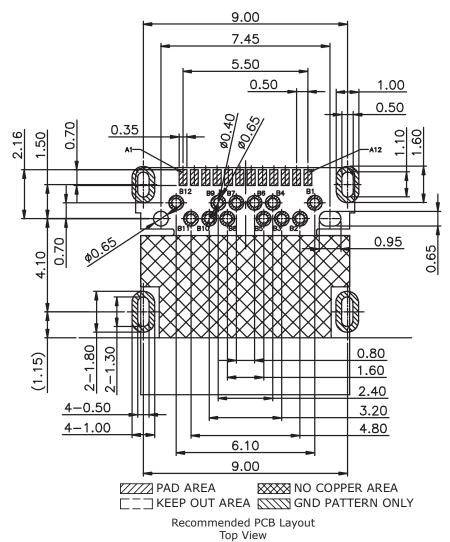




## **MECHANICAL DRAWING (CONTINUED)**

units: mm PCB tolerance: ±0.05 mm

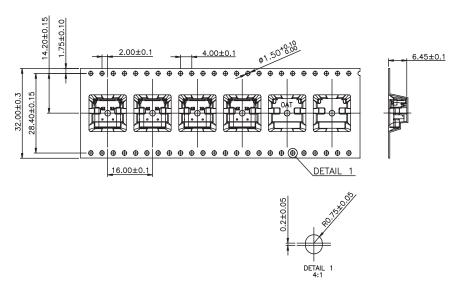
PIN CONNECTIONS						
PIN	SIGNAL NAME	MATING SEQUENCE	PIN	SIGNAL NAME	MATING SEQUENCE	
A1	GND	FIRST	B12	GND	FIRST	
A2	SSTXp1	SECOND	B11	SSRXp1	SECOND	
А3	SSTXn1	SECOND	B10	SSRXn1	SECOND	
A4	V <sub>BUS</sub>	FIRST	В9	$V_{\scriptscriptstyle BUS}$	FIRST	
A5	CC1	SECOND	В8	SBU2	SECOND	
A6	Dp1	SECOND	В7	Dn2	SECOND	
A7	Dn1	SECOND	В6	Dp2	SECOND	
A8	SBU1	SECOND	B5	CC2	SECOND	
A9	V <sub>BUS</sub>	FIRST	B4	V <sub>BUS</sub>	FIRST	
A10	SSRXn2	SECOND	В3	SSTXn2	SECOND	
A11	SSRXp2	SECOND	B2	SSTXp2	SECOND	
A12	GND	FIRST	B1	GND	FIRST	
	SHELL GNI		SHELL		GND	

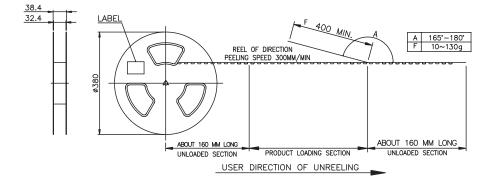


## **PACKAGING**

units: mm

Reel Size: Ø380 mm Reel QTY: 800 pcs per reel





Additional Resources: Product Page | 3D Model | PCB Footprint

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### **REVISION HISTORY**

rev.	description	date	
1.0	initial release	12/19/2017	
1.01	updated datasheet	01/30/2018	
1.02	changed cover shell material to be stainless steel, removed plating from inner ground cover shell	04/01/2019	
1.03	brand update	02/05/2020	

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

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