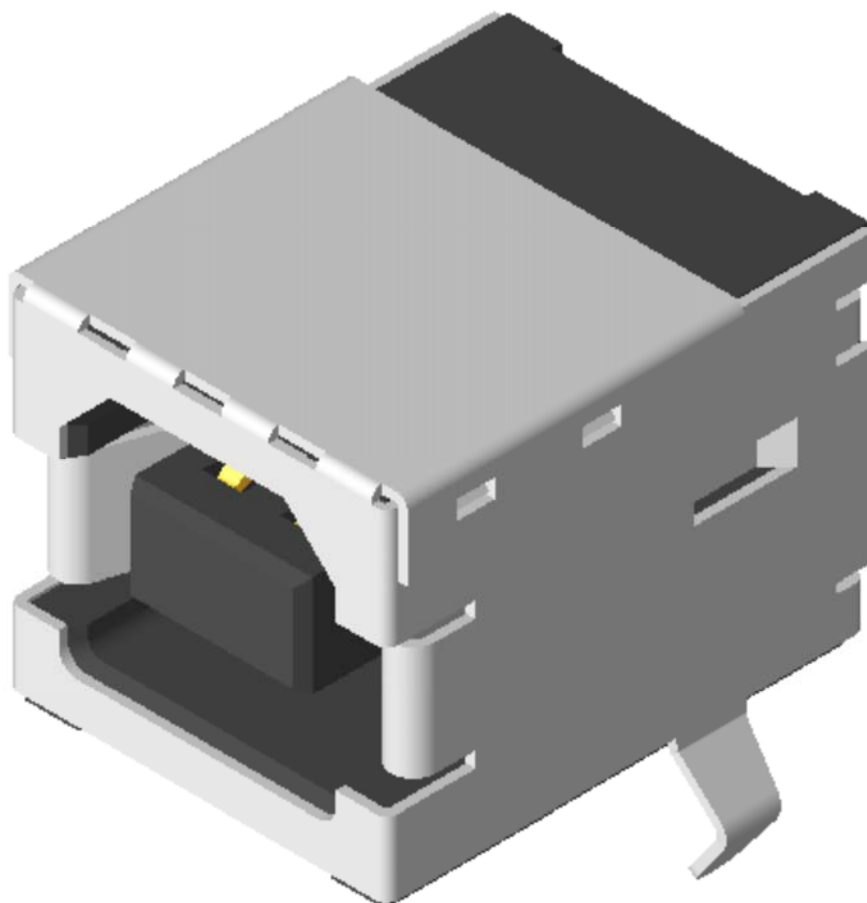




# PRODUCT SPECIFICATION



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(NUCONN)

REVISION:	ECR/ECN INFORMATION:		PRODUCT NO	HTUSRXR-241 SERIES	SHEET No
A	EC No:	NEW SPEC.	PRODUCT NAME	USB B TYPE FLAT 4PIN DIP	1 of 4
	DATE:	2015/06/08			
DOCUMENT NUMBER:		CREATED / REVISED BY:		CHECKED BY:	APPROVED BY:
PS-UB-0017		Linda		Jerry	kimi



# PRODUCT SPECIFICATION

## 1.0 SCOPE

This Product Specification covers the USB connector series with terminal tin plating and cover selective plating for IR reflow process.

## 2.0 PRODUCT DESCRIPTION

### 2.1 PRODUCT NAME AND SERIES NUMBER(S)

USB B TYPE CONNECTOR

P/N:HTUSRXR-241 SERIES

### 2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS

See the appropriate drawings (HTUSRXR-241 SERIES)for information on dimensions, materials, plating and markings.

## 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

MIL-STD-1344A

EIA-STD- 202

EIA-364

## 4.0 RATINGS OF CONNECTOR

1. Rate Voltage: 30 V DC  
Rate Current: 1.5 A DC
2. Operating temperature: -40°C to +110°C  
Storage temperature : -40°C to +85°C

## 5.0 ELECTRICAL REQUIREMENTS

Test Ref	DESCRIPTION	TEST CONDITION	REQUIREMENT
5.1	Contact Resistance	Mate connectors: apply a maximum voltage of 20 mV and a current of 100 mA.	30 milliohms MAXIMUM
5.2	Insulation Resistance	Unmated connector, mounted to a PCB: apply a voltage of 500 VDC between adjacent terminals and between terminals to ground.	1000 Megohms MINIMUM
5.3	Dielectric Withstanding Voltage	500 VAC rms (1mA cutoff current) for 60 seconds duration between adjacent terminals and terminals.	No Breakdown
5.4	Capacitance	Test between adjacent contacts to 1 Megahertz max per EIA-364.	2 picofarad MAXIMUM
5.5	Current Temperature Rating	Mate connector and measure the temperature rise at the rated current (1.5Amps).	30°C rise MAXIMUM from initial

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## 6.0 MECHANICAL REQUIREMENTS

Test Ref	DESCRIPTION	TEST CONDITION	REQUIREMENT
6.1	Connector Mate and Unmate Force	Mate connector at a rate of $25 \pm 6$ mm ( $1 \pm \frac{1}{4}$ inch) per minute.	<b>3.57Kgf (35 N) MAXIMUM</b> mate force <b>1.5 Kgf (15 N) MINIMUM</b> unmate force
6.2	Terminal Retention	Apply a pull out force in the axial direction of the contact per Mil-STD-1344A method 2007.1	<b>0.8 Kgf minimum</b>
6.3	Vibration	Mated connector and subject to the following vibration condition, for a period of 15 minutes in each 3 mutually perpendicular axes. Per EIA-364-28, Test condition V, Test letter A.	Contact Resistance <b>30</b> milliohms MAXIMUM Discontinuity $\leq 1$ usec
6.4	Mechanical Shock	Subject mated connector to 30 G half sine in 11 msec according to EIA-364-27.	Contact Resistance <b>30</b> milliohms MAXIMUM Discontinuity $\leq 1$ usec
6.5	Durability	Mate this connector with its mating part of 1500 cycles. Other conditions follow per EIA-364-09.	Contact Resistance <b>30</b> milliohms MAXIMUM

## 7.0 ENVIRONMENTAL REQUIREMENTS

Test Ref	DESCRIPTION	TEST CONDITION	REQUIREMENT
7.1	Steady State Humidity	Mate connectors; Temperature: $40 \pm 2^\circ\text{C}$ Relative humidity: <b>90-95%</b> Duration time: <b>168</b> hours	Contact Resistance <b>30</b> milliohms MAXIMUM
7.2	Solderability	Dip solder tails into the molten solder (held at $245 \pm 5^\circ\text{C}$ ) up to 1.0mm from the bottom of the housing for $3 \pm 0.5$ seconds	Solderable area shall have minimum of <b>95%</b> solder coverage
7.3	Temperature Life (Thermal Aging)	Subject mated connector to ambient temperature $125^\circ\text{C}$ for 250 hours. Per Mil-STD-1344A method 1005.1 condition B	Contact Resistance <b>30</b> milliohms MAXIMUM
7.4	Thermal Shock	Subject mated connector to 10 cycles of exposure at $-40^\circ\text{C}$ to $+110^\circ\text{C}$ per EIA-364-32.	Contact Resistance <b>30</b> milliohms MAXIMUM
7.5	Reflow	Place connector in IR reflow, Peak temperature: $260 \pm 5^\circ\text{C}$ for $5 \pm 1$ seconds	Appearance : No damage

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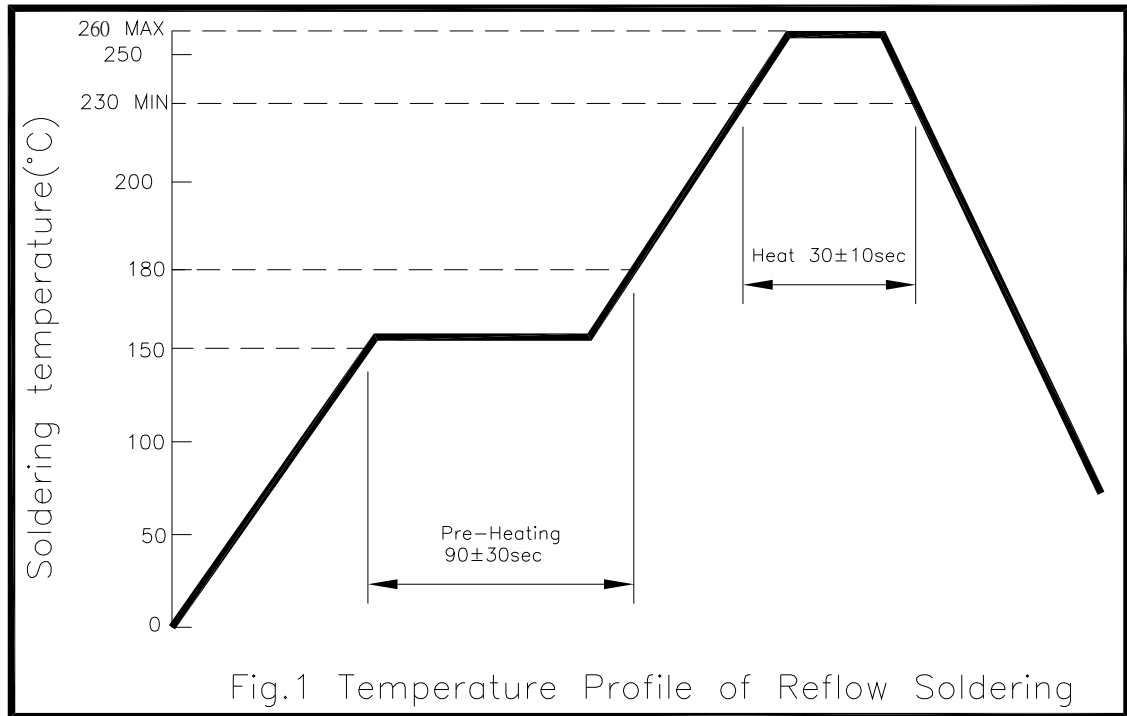


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## 8.0 PACKAGING

Parts shall be packaged to protect against damage during handling, transit and storage.  
See appropriate sales drawings.

## 9.0 RECOMMENDED REFLOW PROFILE



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PS-UB-0017		Linda		Jerry	kimi

AdRon 文件制訂、修訂、廢止申請單

RD-PS-A-001-223

文件編號	PS-UB-0017	文件名稱	HTVSRXR-241 Series 規格書		
申請部門	業務部	申請人	Frances	日期	6/8/15
制訂單位	工程部	制訂人	Linda	日期	6/8/15
<input checked="" type="checkbox"/> 制訂 <input type="checkbox"/> 修訂 <input type="checkbox"/> 廢止原因說明	新制訂				
相關單位審查	Judy 6/9/15 Jef 6/8/15				
核准	Judy 6/8/15				