



# APPROVAL SHEET

## UPRNS84EB3L9T

## 10k/10k/10k/10k

MOLD TYPE ULTRA PRECISION

RESISTOR NETWORKS

PRODUCE	CHECK AND APPROVED	ACCEPTED BY
EM	CE	HONORABLE CUSTOMER
Edison Chen	Charles Chen	
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## 1. PRODUCT:

ULTRA-PRECISION METAL FILM RESISTOR NETWORKS, MOLD TYPE

## 2. PART NUMBER:

Part number is identified by the series name, number of leads, number of resistors, layout profile, tolerance, temperature coefficient, match tolerance, match temperature coefficient, packing type and resistance values.

For Example:

UPRNS	8	4	E	B	3	L	9	T	4002
Series Name	Number of Leads	Number of Resistors	Layout	Tol.	TCR	Match Tol.	Match TCR	Packing	Resistances

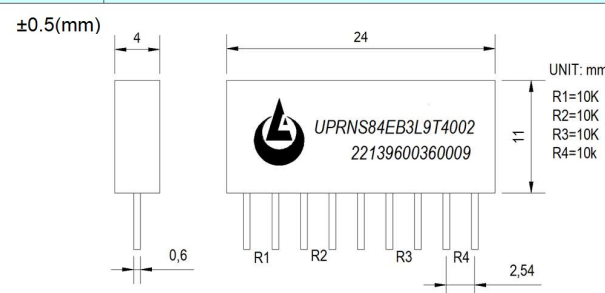
- (1) Series name: UPRNS
- (2) Number of the leads: 8 pins
- (3) Number of resistors: 4 pcs 10k/10k/10k/10k
- (4) S: resistors are series connected inside
- (5) Tolerance: B=±0.1%;
- (6) TCR : 3=±25ppm/°C;
- (7) Match Tol. L=±0.01%
- (8) Match TCR 9=±2ppm/°C;
- (9) Packing: T= tube/box
- (10) Resistance value: see electric characteristics

## 3. Marking:

Digital marking with part number and batch number and lot number



## 4. ELECTRICAL CHARACTERISTICS

Type	UPRNS84EB3L9T4002	型号
Standard applied	Q/SLC004-2011	执行标准
Cross to CADDOCK's type	T914-10K-010-02	替代CADDOCK公司的产品型号
Customer's part number	868-00029-000	用户的物料代码
Power rating at 70°C	0.1W	70°C 以下额定功率
Resistance range	R1=R2=R3=R4=10K	标准阻值范围
Tolerance	B(±0.1%)	精度
Temperature coefficient	±25ppm/°C	温度系数
Match tolerance	L(±0.01%)	匹配精度
Match temperature coefficient	9=±2ppm/°C	匹配温度系数
Operating Temperature range	-55°C~25°C; 25°C~125°C	工作环境温度
Shelf stability ratio	≤50ppm for 180days at shelf condition	储存稳定性
Dielectric strength between resistors	50V <sub>RMS</sub>	工作环境温度
Dimension	 <p>±0.5(mm)</p> <p>UNIT: mm R1=10K R2=10K R3=10K R4=10k</p>	尺寸

\* Unless otherwise specified, all values are tested at the following condition:

Temperature: 21°C to 25°C; Relative humidity: 45% to 60%



## 5. ENVIRONMENTAL CHARACTERISTICS

### (1) Temperature Coefficient Test

IEC 60115-1, 4.8: Test of resistors at room temperature and 60°C above the room temperature. Then measure the resistance. The Temperature Coefficient is calculated by the following equation and its value should be within the range requested.

$$\text{Resistor Temperature Coefficient} = \frac{R - R_0}{R_0} \times \frac{1}{t - t_0} \times 10^6$$

R = Resistance value under the testing temperature

R<sub>0</sub> = Resistance value at the room temperature

t = the 2<sup>nd</sup> testing temperature

t<sub>0</sub> = Room temperature

### (2) Short Time Overload Test

IEC60115-1 4.13: Applied at 6 times power rating voltage for 5 seconds, the resistor should be free from defects. The change of the resistance value should be within ±(0.02%) compared with the value before the test.

### (3) Solderability

IEC 60115-1, 4.17: 235±5°C for 3±0.5 Seconds, there are at least 95% solder coverage on the termination.

### (4) Damp Heat Steady State

IEC 60115-1, 4.24: 40±2°C, 90-95% RH for 56 days, loaded with 0.1 times RCWV or the maximum working voltage whichever is lower. The change of the resistance value should be within ± (0.05%) compared with the value before the load.

### (5) Load Life Test

IEC 60115-1, 4.25: 70±2°C at 10,000V for 1,000+48/-0 Hr. (1.5Hr. on, 0.5Hr. off). The resistors shall be arranged not much effected mutually by the temperature of others and the excessive ventilation shall not be performed. The change of the resistance value should be within ± (0.05%) compared with the value before the load.



## Disclaimer

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