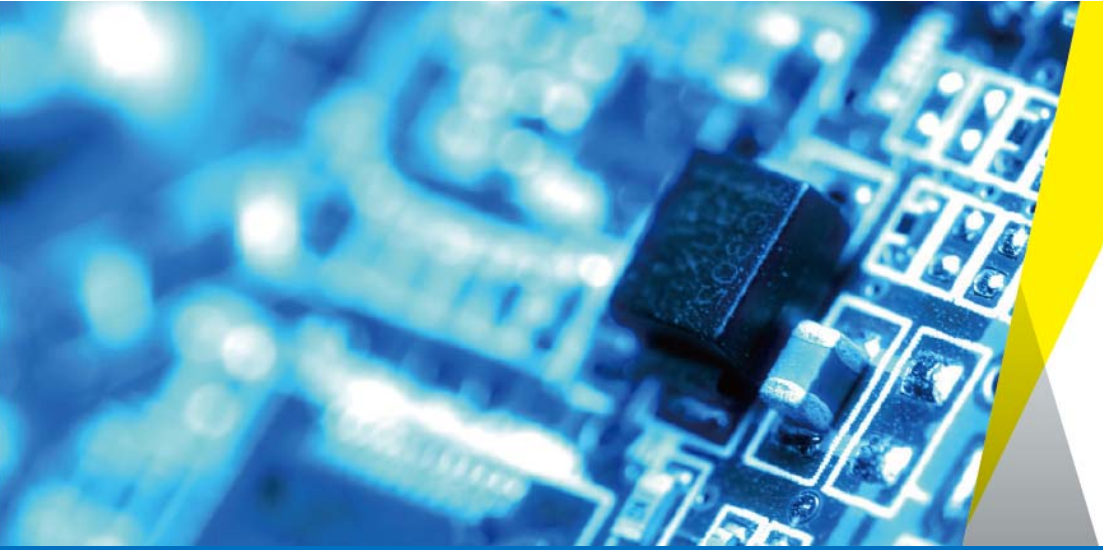


DATASHEET

Product Name **0Ω Resistor**

Part Name **ZOC/TOE0 Series**

File No. **DIP-SP-076**

Uniroyal Electronics Global Co., Ltd.

88#, Longteng Road, Economic & Technical Development Zone, Kunshan, Jiangsu, China

Tel +86 512 5763 1411 / 22 /33

Email marketing@uni-royal.cn

Manufacture Plant Uniroyal Electronics Industry Co., Ltd.

Aeon Technology Corporation

Royal Electronic Factory (Thailand) Co., Ltd.

Royal Technology (Thailand) Co., Ltd.

1. Scope

1.1 This specification for approve relates to the 0Ω Resistor by UNI-ROYAL.
1.2 Conductive layer formed by Copper Plating (or Tin plating) process.
1.3 Resistance value can be lowest to mini ohm range.
1.4 Ceramic rod core or Alloy rod core.

2. Explanation of Part No. System

The standard Part No. includes 14 digits with the following explanation:

2.1 The 1st to 2rd digits are to indicate the product type .
Example: ZO= Zero ohm Copper plated rod； TO= Zero ohm Tin plated rod

2.2 The 3th digit is the type.
Example: C= Capped Filming Rod

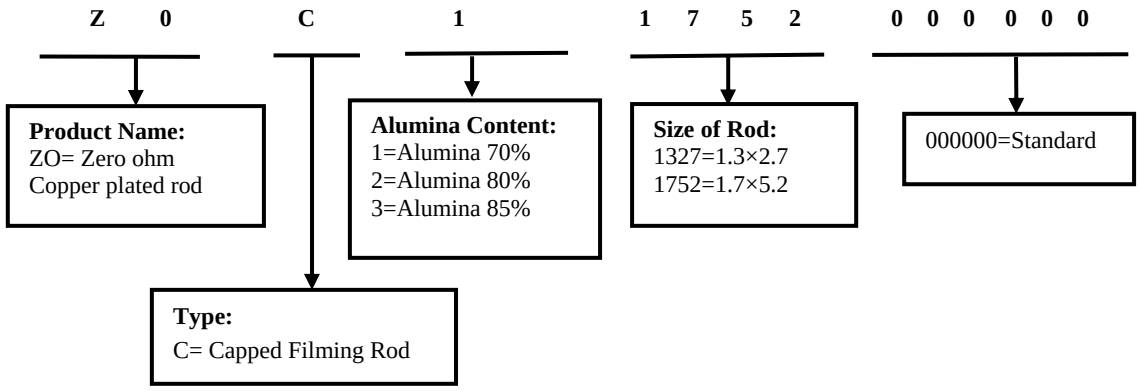
2.3 The 4th digit is the Alumina Content.
Example: 1= Alumina 70%； 2= Alumina 80%； 3= Alumina 85%

2.4 The 8th to 11th digits is to denote the Size of Rod.
Example: 1327=1.3×2.7 ; 1752=1.7×5.2 ; 1755=1.7×5.5 ; 1760=1.7×6.0 ; 2075=2.0×7.5 ; 2080=2.0×8.0 ; 2580=2.5×8.0;
3080=3.0×8.0 ; 3010=3.0×10 ; 3510=3.5×10 ; 4014=4.0×14 ; 5016=5.0×16 ; 7023=7.0×23

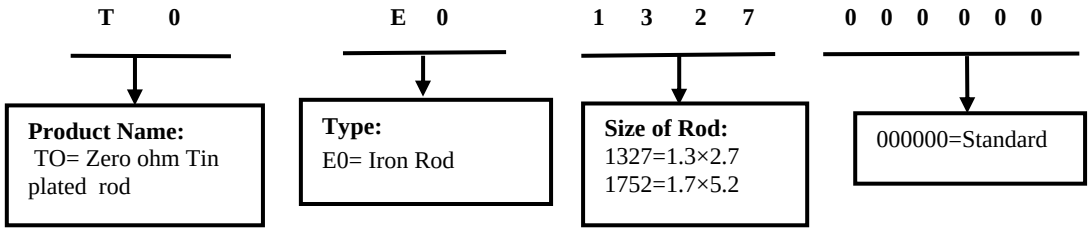
2.5 The 9th to 14th digits is to Standard：
Example: 0=Standard

3. Ordering Procedure:

3.1 (Example: ZOC11752000000)

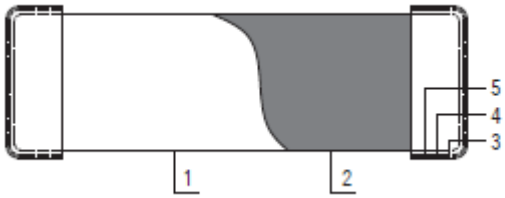


3.2 (Example: Example: TOE01327000000)



4. Dimension

4.1 Copper Film Ceramic Rod

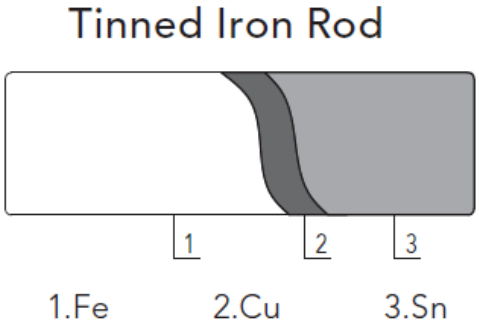


1. Ceramic
2. Film
3. Cap (iron)
4. Cap (copper)
5. Cap (tin)

Unit：mm

NO	Size	Copper Film Ceramic Rod		Copper Film Capped Ceramic Rod	
		D	L	D	L
1	1.3x2.7	1.30±0.02	2.7±0.1	1.60~1.70	2.89~3.14
2	1.7x5.2	1.70±0.03	$5.2^{+0.1}_{-0.2}$	2.09~2.21	5.39~5.74

4.2 Tinned Iron Rod



Unit：mm

NO	Size	Tinned Iron Rod	
		D	L
1	1.3x2.7	1.50 ± 0.05	3.00 ± 0.05
2	1.7x5.2	2.00 ± 0.05	5.60 ± 0.05

5. IRV (Initial Resistance Value) Range

Standard resistance value <=50mE, other value or special structure can be specially provided

6. The test method of length and diameter:

1. Check whether the Micrometer is zero
2. Measured a copper ceramic rod with micrometer, the principle of measure is micrometer close to measurement end exactly, should not have the force
3. First read the digital of micrometer's main scale, attention to whether the following scale line of 0.5mm has been exposed, if exposed it must be added
4. And then read the digital of micrometer's deputy scale
5. Add the digital of main scale to the digital of deputy scale, the value is the measure digital of measured objects

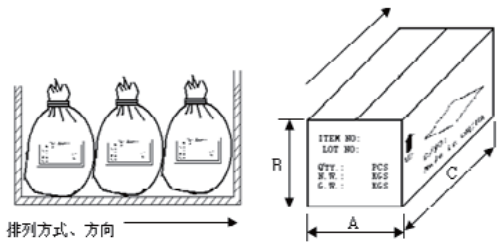
7. The package:

Products should be packed with double-layer plastic, The middle of a two-tier film bag add label , the label contains product name, length, diameter, date, lot number, QC and OK logo, Quarter label.

8. Appearance requests:

1. A copper ceramic rod should be straight, without bent and shape change.
2. Incision is not inclined, without faults, defects.
3. without black spot, Pinhole in the surface of a ceramic rod.

9. Packing



	Type	Size (mm)			Quantity (KPCS)	
		A	B	C	Pouch	Box
Copper plated 0 ohm in Ceramic core	1.3x2.7	25	20	45	600	1800
Tin plated 0 ohm in Ceramic core	1.7x5.2	25	20	45	200	600
Copper plated 0 ohm in Steel core	1.3x2.7	25	20	45	300	900
Tin plated 0 ohm in Steel core	1.7x5.2	25	20	45	100	300

10. Note

10.1 UNI-ROYAL recommend the storage condition temperature: 15℃~35℃, humidity :25%~75%
(Put condition for individual product)
Even under UNI-ROYAL recommended storage condition, solderability of products over 1 year old (Put condition for each product) may be degraded.

10.2 Store / transport cartons in the correct direction, which is indicated on a carton as a symbol.
Otherwise bent leads may occur due to excessive stress applied when dropping of a carton.

10.3 Product performance and soldered connections may deteriorate if the products are stored in the following places:
a. Storage in high Electrostatic
b. Storage in direct sunshine、rain and snow or condensation
c. Where the products are exposed to sea winds or corrosive gases, including Cl_2, H_2S_3 NH_3, SO_2, NO_2.

11. Record

Version	Description of amendment	Page	Date	Amended by	Checked by
1	First issue of this specification	1~7	Aug.23,2018	Chen Haiyan	Chen Nana