



# DATA SHEET

## CHIP Low Leakage Current

### Serie: I15004

Voltage:	50Volt	Range:	0,47 $\mu$ F
Impedance:	459 $\Omega$	Dimension	4x5,4mm
Ripple Current:	5mA		

**CHIP Low Leakage Current**

Serie No.: **I15004**

Customer:

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	03.06.2014
APPD:	Schumi			FINISH	Jamy		Sheet No.	1 from 7	

# EDCON-COMPONENTS



Designed for surface mounting on high density circuit board

Emboss carrier tape packing systems is available for automatic insertion



## Technical Informations

Voltage:	<b>50Volt</b>
Range;	<b>0,47µF</b>
Dimension; D x L mm	<b>4x5,4mm</b>
Impedance (Ω) max., at20°C, 100hKz	<b>459Ω</b>
Ripple Current (mA rms) at 105°C, 100kHz	<b>5mA</b>

Ordering Code			
<b>500</b>	<b>Voltage</b>		
<b>R47</b>	<b>Range</b>		
<b>D=</b>	<b>A</b>	<b>L=</b>	<b>0</b>

- Low Leakgae current ( 0,5µA to 3,3µA max).
- Low cost for replacement of some tantalum applications
- Low Impedance with Operating Temperatur Range of -40°C ~ +85°C
- Load Life of 2000hours

<b>Leakage current max.</b>	I = 0,002CV or 0,5µA whichever is greater ( after 2 minutes)	
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<b>Capacitance tolerance</b>	± 20% at 120Hz, 20°C																
<b>Dissipation factor max. (at 120Hz, 20°C)</b>		WV															
	Tanδ	Ø4 ~ Ø6,3mm	6,3	10	16	25	35	50									
			0,24	0,20	0,16	0,14	0,12	0,10									

<b>Low Temperatur characteristics ( Impedance ratio at 120Hz )</b>		WV															
		Z-25°C / Z+20°C	6,3	10	16	25	35	50									
		Z-40°C / Z+20°C	4	3	2	2	2	2									
			8	6	4	4	3	3									

<b>Load Life ( after application of the rated voltage for 2000hrs at 85°C</b>	Leakage current	Less than specified value
	Capacitance Change	Within ±25% of initial value
	Tanδ	Less than 200% of specified value
	Ø4 ~ Ø6,3x5,4: 1000hours	

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<b>Resistance to soldering heat</b>	After reflow soldering and resistance at room temperature, they meet the characteristics requirements listed at underside	
	Leakage current	Less than specified value
	Capacitance Change	Within $\pm 10\%$ of initial value
	Tan $\delta$	Less than specified value

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT						
Frequency	50Hz	120Hz	300Hz	1KHz	10KHz $\leq$	
Coefficient	0,70	1,00	1,17	1,36	1,50	

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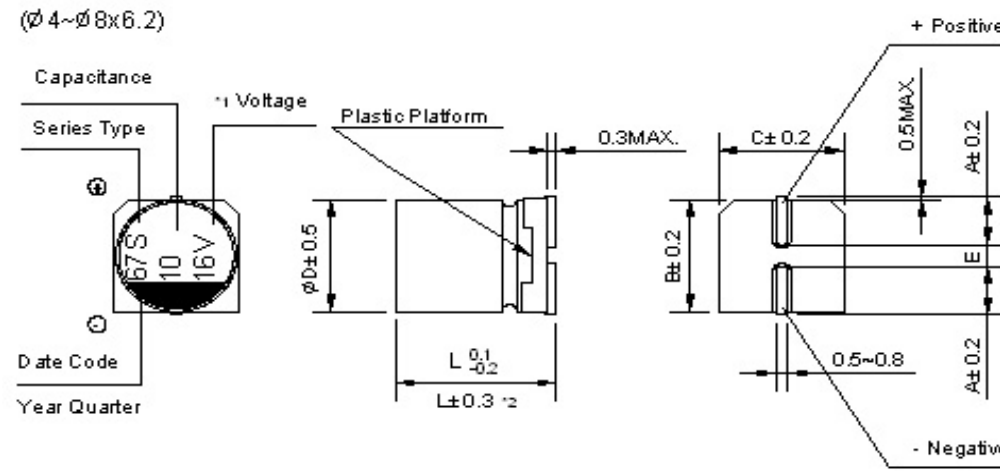


## Technical Drawing

### Dimension of Size $\varnothing$ 8x10,5 ~ 16mm



### Dimension of Size $\varnothing$ 4~ 8x6,2mm



D x L	$\varnothing$ 4 x 5,4	$\varnothing$ 5 x 5,4	$\varnothing$ 6,3 x 5,4	$\varnothing$ 6,3 x 7,7						
A	2,0	2,2	2,6	2,6						
B	4,3	5,3	6,6	6,6						
C	4,3	5,3	6,6	6,6						
E +/-0.2	1,0	1,3	1,9	1,9						
L	5,4	5,4	5,4	7,7						

\*1 Voltage mark (6V) represents 6,3V for  $\varnothing$  4 ~ 10mm

\*3 (L +/- 0.5) is applicable to  $\varnothing$  8x10,5 ~  $\varnothing$  10mm

\*2 (L +/- 0.3) is applicable to  $\varnothing$  6,3 ~ 7.7 and  $\varnothing$  8 + 6,2mm

\*4 (L +/- 1.0) is applicable to  $\varnothing$  12,5 ~  $\varnothing$  16mm

RE. Date code and seriew type -1st digit for Year 2nd digit for Quarter, 4 quarter codes in one year area 1,4,7,0

3rd character for Serie S

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Voltage Ordering Code	Code
4,0	<b>4V0</b>
6,3	<b>6V3</b>
10	<b>100</b>
16	<b>160</b>
25	<b>250</b>
35	<b>350</b>
50	<b>500</b>
63	<b>630</b>
80	<b>800</b>
100	<b>101</b>

Diameter ordering Code D	Code
3mm	<b>3</b>
4mm	<b>A</b>
5mm	<b>B</b>
6,3mm	<b>C</b>
8mm	<b>E</b>
10mm	<b>G</b>
12,5mm	<b>I</b>
16mm	<b>K</b>

Height ordering Code L	Code
4mm	<b>A</b>
5,4mm	<b>0</b>
5,8mm	<b>1</b>
6,2mm	<b>2</b>
7,7mm	<b>3</b>
10,5mm	<b>4</b>
13,5mm	<b>5</b>
16mm	<b>6</b>
16,5mm	<b>7</b>

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## Ordering Informations

Serie	Voltage Code	Tolerance Code	Range Code	Size Code D	Size Code L	Special function	ROHS	Packing Code		
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<b>I15004</b>	<b>500</b>	<b>M</b>	<b>R47</b>	<b>A</b>	<b>0</b>	<b>XX</b>	<b>R</b>	<b>TR</b>		
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look table Voltage Code	<b>M= ±20%</b>	Ordering Code Range	Look table Code D	Look table Code L	<b>XX= No function</b>	<b>R= ROHS Conform</b> <b>N= NON ROHS Conform</b>	<b>TR= Tape Reel Packing</b> <b>BU= Bulk-Ware</b>		
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## Soldering Profile Curve

### Classification Reflow Profile (JEDEC J-STD-020C)



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