



# DATA SHEET

## CHIP 5000Hours Load Life 105°C

### Serie: I15009

Voltage: 10Volt Range: 22 $\mu$ F

Impedance: no specified Dimension 5x5,8mm

Ripple Current: 30mA

CHIP 5000Hours Load Life 105°C

Serie No.: I15009

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>10Volt</b>
Range:	<b>22µF</b>
Dimension; D x L mm	<b>5x5,8mm</b>
Impedance (Ω) max., at20°C, 100hKz	<b>no specified</b>
Ripple Current (mA rms) at 105°C, 100kHz	<b>30mA</b>

Ordering Code			
<b>100</b>	<b>Voltage</b>		
<b>220</b>	<b>Range</b>		
<b>D=</b>	<b>B</b>	<b>L=</b>	<b>1</b>

Operating Temperatur Range of -55°C ~ +105°C

Load Life of 3000~5000 hours

<b>Leakage current max.</b>	Ø4 ~ Ø10mm	I= 0,01CV or 3µA whichever is greater ( after 2 minutes)
	Ø12,5 ~ Ø16mm	I= 0,03CV or 4µA whichever is greater ( after 1 minutes)

**Capacitance tolerance** ± 20% at 120Hz, 20°C

<b>Dissipation factor max. (at 120Hz, 20°C)</b>	WV		6,3	10	16	25	35	50	63	100				
	Tanδ	Ø4 ~ Ø10mm	0,28	0,24	0,20	0,16	0,13	0,12	0,12	0,12				
		Ø12,5 ~ Ø16mm	0,38	0,34	0,30	0,26	0,22	0,18	0,18	0,18				

<b>Low Temperatur characteristics ( Impedance ratio at 120Hz )</b>	WV		6,3	10	16	25	35	50	63	100				
	Ø4 ~ Ø10mm	Z-25°C / Z+20°C	3	3	2	2	2	2	2	2				
		Z-55°C / Z+20°C	8	5	4	3	3	3	3	3				
	Ø12,5 ~ Ø16mm	Z-25°C / Z+20°C	5	4	3	2	2	2	2	2				
Z-55°C / Z+20°C		12	10	8	5	4	3	3	3					

<b>Load Life ( after application of the rated voltage for 5000hrs at 125°C</b>	Leakage current	Less than specified value
	Capacitance Change	Within ±30% of initial value
	Tanδ	Less than 300% of specified value
	Ø4 ~ Ø6,3x5,8 , Ø8x6,2 ~ Ø6,3: 3000hours	

**CHIP 5000Hours Load Life 105°C**

Part No.: **I15009**

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	03.06.2014
APPD:	Schumi			FINISH	Jamy		Sheet No.		2 from 7

Customer:

# EDCON-COMPONENTS



Designed for surface mounting on high density circuit board

Emboss carrier tape packing systems is available for automatic insertion



**Shell life (at 105°C)** After 1000hours no load test, leakage current, capacitance and tan $\delta$  are same as load life value.

<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

Size	FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT					
	Capacitance $\mu\text{F}$	Frequency				
		50Hz	120Hz	300Hz	1KHz	10KHz $\leq$
$\varnothing 4 \sim \varnothing 10\text{mm}$		0,70	1,00	1,17	1,36	1,50
$\varnothing 12,5 \sim \varnothing 16\text{mm}$	<b>~68</b>	0,75	1,00	1,35	1,57	2,00
	<b>100 ~470</b>	0,80	1,00	1,23	1,34	1,50
	<b>680 ~3300</b>	0,85	1,00	1,10	1,13	1,15

**CHIP 5000Hours Load Life 105°C**

Part No.: **I15009**

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	03.06.2014	Customer:
APPD:	Schumi			FINISH	Jamy		Sheet No.	3 from 7		

# EDCON-COMPONENTS



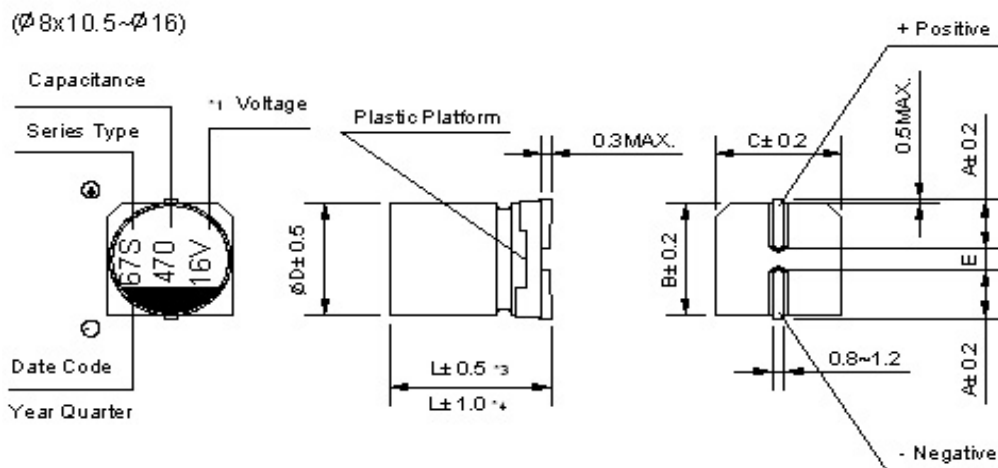
Designed for surface mounting on high density circuit board

Emboss carrier tape packing systems is available for automatic insertion

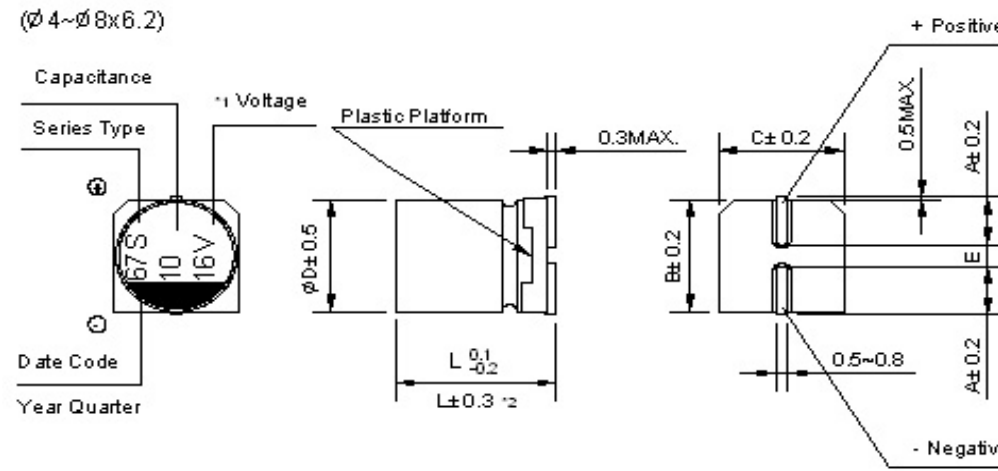


## Technical Drawing

### Dimension of Size $\varnothing 8 \times 10,5 \sim 16 \text{mm}$



### Dimension of Size $\varnothing 4 \sim 8 \times 6,2 \text{mm}$



D x L	$\varnothing 4 \times 5,8$	$\varnothing 5 \times 5,8$	$\varnothing 6,3 \times 5,8$	$\varnothing 6,3 \times 7,7$	$\varnothing 8 \times 6,2$	$\varnothing 8 \times 10,5$	$\varnothing 10 \times 10,5$	$\varnothing 10 \times 13,5$	$\varnothing 12,5 \times 13,5$	$\varnothing 12,5 \times 16$	$\varnothing 16 \times 16,5$
A	2,0	2,2	2,6	2,6	3,4	3,0	3,3	3,3	4,9	4,9	5,8
B	4,3	5,3	6,6	6,6	8,4	8,4	10,4	10,4	13,0	13,0	17,0
C	4,3	5,3	6,6	6,6	8,4	8,4	10,4	10,4	13,0	13,0	17,0
E +/-0.2	1,0	1,3	1,9	1,9	2,3	3,1	4,7	4,7	4,7	4,7	6,4
L	5,8	5,8	5,8	7,7	6,2	10,5	10,5	13,5	13,5	16,0	16,5

\*1 Voltage mark (6V) represents 6,3V for  $\varnothing 4 \sim 10 \text{mm}$

\*3 (L +/- 0.5) is applicable to  $\varnothing 8 \times 10,5 \sim \varnothing 10 \text{mm}$

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

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

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

**CHIP 5000Hours Load Life 105°C**

Part No.: **I15009**

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	03.06.2014	Customer:
APPD:	Schumi			FINISH	Jamy		Sheet No.	4 from 7		

[www.edcon-components.com](http://www.edcon-components.com)

email: [info@edcon-components.com](mailto:info@edcon-components.com)

# EDCON-COMPONENTS



Designed for surface mounting on high density circuit board

Emboss carrier tape packing systems is available for automatic insertion



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

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

Height ordering Code L	Code
4mm	A
5,4mm	0
5,8mm	1
6,2mm	2
7,7mm	3
10,5mm	4
13,5mm	5
16mm	6
16,5mm	7
21,5mm	8

**CHIP 5000Hours Load Life 105°C**

Part No.: **I15009**

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	03.06.2014
APPD:	Schumi			FINISH	Jamy		Sheet No.		5 from 7

Customer:

# EDCON-COMPONENTS



Designed for surface mounting on high density circuit board

Emboss carrier tape packing systems is available for automatic insertion



## Ordering Informations

Serie	Voltage Code	Tolerance Code	Range Code	Size Code D	Size Code L	Special function	ROHS	Packing Code		
-------	--------------	----------------	------------	-------------	-------------	------------------	------	--------------	--	--

<b>I15009</b>	<b>100</b>	<b>M</b>	<b>220</b>	<b>B</b>	<b>1</b>	<b>XX</b>	<b>R</b>	<b>TR</b>		
---------------	------------	----------	------------	----------	----------	-----------	----------	-----------	--	--

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>		
-------------------------	----------------	---------------------	-------------------	-------------------	------------------------	--	--	--	--

**CHIP 5000Hours Load Life 105°C**

Part No.: **I15009**

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	03.06.2014	Customer:
APPD:	Schumi			FINISH	Jamy		Sheet No.	6 from 7		

# EDCON-COMPONENTS

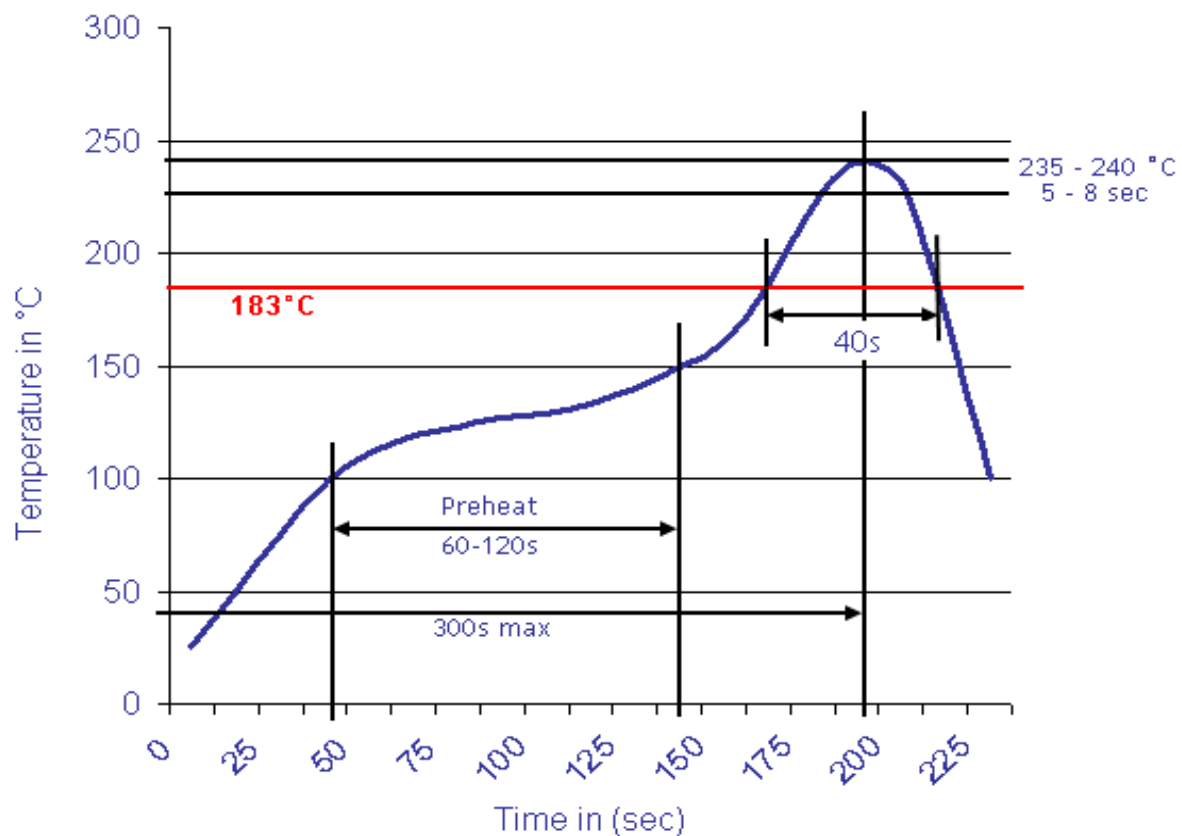


Designed for surface mounting on high density circuit board  
 Emboss carrier tape packing systems is available for automatic insertion



## Soldering Profile Curve

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



**CHIP 5000Hours Load Life 105°C**

Part No.: **I15009**

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

Customer: