



# DATA SHEET

## CHIP Wide Temperature Range 105°C

### Serie: I15005

Voltage: 16Volt                      Range: 100µF

Impedance: no specified                      Dimension 6,3x5,4mm

Ripple Current: 60mA

**CHIP Wide Temperature  
Range 105°C**

Serie No.: **I15005**

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>16Volt</b>
Range:	<b>100µF</b>
Dimension; D x L mm	<b>6,3x5,4mm</b>
Impedance (Ω) max., at20°C, 100hKz	<b>no specified</b>
Ripple Current (mA rms) at 105°C, 100kHz	<b>60mA</b>

Ordering Code			
<b>160</b>	<b>Voltage</b>		
<b>101</b>	<b>Range</b>		
<b>D=</b>	<b>C</b>	<b>L=</b>	<b>0</b>

Operating Temperatur Range of -40°C ~ +85°C

Load Life of 1000~2000 hours at 85°C

<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)									
<b>Capacitance tolerance</b>	± 20% at 120Hz, 20°C										
<b>Dissipation factor max. (at 120Hz, 20°C)</b>	WV		4,0	6,3	10	16	25	35	50	63	100
	Tanδ	Ø4 ~ Ø10mm	0,42	0,30	0,26	0,22	0,16	0,14	0,21	0,12	0,12
		Ø12,5 ~ Ø16mm	0,45	0,38	0,34	0,30	0,26	0,22	0,18	0,14	0,12

<b>Low Temperatur characteristics ( Impedance ratio at 120Hz )</b>	WV		4,0	6,3	10	16	25	35	50	63	100
	Ø4 ~ Ø10mm	Z-25°C / Z+20°C	7	4	3	2	2	2	2	2	2
		Z-40°C / Z+20°C	15	8	6	4	4	3	3	3	4
	Ø12,5 ~ Ø16mm	Z-25°C / Z+20°C	7	5	4	3	2	2	2	2	2
Z-40°C / Z+20°C		17	12	10	8	5	4	3	3	3	

<b>Load Life ( after application of the rated voltage for 1000hrs at 105°C</b>	Leakage current	Less than specified value									
	Capacitance Change	Within ±20% of initial value									
		Within ±30% of initial value for 4V & 6,3V									
	Tanδ	Less than 200% of specified value									
<b>Shell life (at 85°C)</b>	Ø4 ~ , Ø6,3x5,4: 1000hours										
	After 1000hours no load test, leakage current, capacitance and tanδ are same as load life value.										

**CHIP Wide Temperature Range 105°C**

Part No.: **I15005**

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



<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						
Diameter	Capacitance	Frequency				
	$\mu\text{F}$	50Hz	120Hz	300Hz	1KHz	10KHz $\leq$
$\varnothing 4 \sim \varnothing 10\text{mm}$	0,1 ~68	0,70	1,00	1,17	1,36	1,50
	100 ~3300	0,85	1,00	1,08	1,20	1,30
$\varnothing 12,5 \sim \varnothing 16\text{mm}$	~68	0,75	1,00	1,35	1,57	2,00
	100 ~680	0,80	1,00	1,23	1,34	1,50
	1000 ~6800	0,85	1,00	1,10	1,13	1,15

<b>CHIP Wide Temperature Range 105°C</b>	
Part No.:	<b>I15005</b>
Customer:	

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	03.06.2014
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 Ø 8x10,5 ~ 16mm



### Dimension of Size Ø 4~ 8x6,2mm



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

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

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

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

\*4 (L +/- 1.0) is applicable to Ø 12,5 ~ Ø 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

**CHIP Wide Temperature  
 Range 105°C**

Part No.: **I15005**

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

Customer:

# 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

<b>CHIP Wide Temperature Range 105°C</b>	
Part No.:	<b>115005</b>
Customer:	

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

# 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>I15005</b>	<b>160</b>	<b>M</b>	<b>101</b>	<b>C</b>	<b>0</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>		
-------------------------	----------------	---------------------	-------------------	-------------------	------------------------	--	------------------------------	--	--

**BU= Bulk-Ware**

<b>CHIP Wide Temperature Range 105°C</b>	
Part No.:	<b>I15005</b>
Customer:	

DRW:	Jason	CHKD	Wilson	MATL:	Wilson	TOLERANCE	Mason	DATE	03.06.2014
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)



<b>CHIP Wide Temperature Range 105°C</b>	
Part No.:	<b>I15005</b>
Customer:	

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