



DATA SHEET

CHIP Low Impedance 105°C

Serie: I15008

Voltage:	50Volt	Range:	47 μ F
Impedance:	1,0 Ω	Dimension	6,3x7,7mm
Ripple Current:	120mA		

CHIP Low Impedance 105°C

Serie No.: **I15008**

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:	50Volt
Range:	47µF
Dimension; D x L mm	6,3x7,7mm
Impedance (Ω) max., at 20°C, 100kHz	1,0Ω
Ripple Current (mA rms) at 105°C, 100kHz	120mA

Ordering Code			
500	Voltage		
470	Range		
D=	C	L=	3

Low Impedance with Operating Temperatur Range of -55°C ~ +105°C
Load Life of 1000~2000hours

Leakage current max.	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

Dissipation factor max. (at 120Hz, 20°C)	WV		6,3	10	16	25	35	50						
	Tan δ	Ø4 ~ Ø10mm	0,22	0,19	0,16	0,14	0,12	0,12						
		Ø12,5 ~ Ø16mm	0,26	0,22	0,18	0,16	0,14	0,12						

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

Load Life (after application of the rated voltage for 2000hrs at 105°C	Leakage current	Less than specified value
	Capacitance Change	Within ±20% of initial value
	Tan δ	Less than 200% of specified value
	Ø4 ~ Ø6,3x5,4: 1000hours	

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

Resistance to soldering heat	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 δ	Less than specified value

Size	FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT					
	Capacitance μF	Frequency				
		50Hz	120Hz	300Hz	1KHz	10KHz \leq
$\varnothing 4 \sim \varnothing 10\text{mm}$	1,0~ 68	0,35	0,50	0,64	0,83	1,00
	100~2200	0,40	0,55	0,70	0,85	1,00
$\varnothing 12,5 \sim \varnothing 16\text{mm}$	~680	0,45	0,65	0,80	0,90	1,00
	1000 ~4700	0,65	0,85	0,95	1,00	1,00

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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	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	5,4	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

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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

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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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I15008	500	M	470	C	3	XX	R	TR		
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look table Voltage Code	M= ±20%	Ordering Code Range	Look table Code D	Look table Code L	XX= No function	R= ROHS Conform N= NON ROHS Conform	TR= Tape Reel Packing BU= Bulk-Ware		
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Soldering Profile Curve

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



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