



# DATA SHEET

## CHIP Low Impedance 105°C

### Serie: I15008

Voltage: 6,3Volt

Range: 3300 $\mu$ F

Impedance: 0,11 $\Omega$

Dimension 12,5x13,5mm

Ripple Current: 820mA

**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:                                 | <b>6,3Volt</b>    |
| Range:                                   | <b>3300µF</b>     |
| Dimension; D x L mm                      | <b>12,5x13,5m</b> |
| Impedance (Ω) max., at20°C, 100hKz       | <b>0,11Ω</b>      |
| Ripple Current (mA rms) at 105°C, 100kHz | <b>820mA</b>      |

| Ordering Code |                |           |          |
|---------------|----------------|-----------|----------|
| <b>6V3</b>    | <b>Voltage</b> |           |          |
| <b>332</b>    | <b>Range</b>   |           |          |
| <b>D=</b>     | <b>I</b>       | <b>L=</b> | <b>5</b> |

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

|                             |               |  |
|-----------------------------|---------------|--|
| <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   |  |  |  |  |  |  |
|   | Tanδ | 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 |  |  |  |  |  |  |

|  |               |                 |     |    |    |    |    |    |  |  |  |  |  |  |
|--|---------------|-----------------|-----|----|----|----|----|----|--|--|--|--|--|--|
| <b>Low Temperatur characteristics ( Impedance ratio at 120Hz )</b> | 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  |    |  |  |  |  |  |  |

|   |                          |                                   |
|---|--------------------------|-----------------------------------|
| <b>Load Life ( after aplication of the rated voltage for 2000hrs at 105°C</b> | Leakage current          | Less than specified value         |
|   | Capacitance Change       | Within ±20% of initial value      |
|   | Tanδ                     | Less than 200% of specified value |
|   | Ø4 ~ Ø6,3x5,4: 1000hours |                                   |

**CHIP Low Impedance 105°C**

Part No.: **I15008**

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**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<br>$\mu\text{F}$                        | 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 $\varnothing 8 \times 10,5 \sim 16 \text{mm}$



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



| D x L    | $\varnothing 4 \times 5,4$ | $\varnothing 5 \times 5,4$ | $\varnothing 6,3 \times 5,4$ | $\varnothing 6,3 \times 7,7$ | $\varnothing 8 \times 6,2$ | $\varnothing 8 \times 10,5$ | $\varnothing 10 \times 10,5$ | $\varnothing 10 \times 13,5$ | $\varnothing 12,5 \times 13,5$ | $\varnothing 12,5 \times 16$ | $\varnothing 16 \times 16,5$ |
|----------|----------------------------|----------------------------|------------------------------|------------------------------|----------------------------|-----------------------------|------------------------------|------------------------------|--------------------------------|------------------------------|------------------------------|
| 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        | 5,4                        | 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  $\varnothing 4 \sim 10 \text{mm}$

\*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

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

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

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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 |  |  |
|-------|--------------|----------------|------------|-------------|-------------|------------------|------|--------------|--|--|
|-------|--------------|----------------|------------|-------------|-------------|------------------|------|--------------|--|--|

|               |            |          |            |          |          |           |          |           |  |  |
|---------------|------------|----------|------------|----------|----------|-----------|----------|-----------|--|--|
| <b>I15008</b> | <b>6V3</b> | <b>M</b> | <b>332</b> | <b>I</b> | <b>5</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><br><b>N= NON ROHS Conform</b> | <b>TR= Tape Reel Packing</b><br><b>BU= Bulk-Ware</b> |  |  |
|-------------------------|----------------|---------------------|-------------------|-------------------|------------------------|--|--|--|--|

|                                 |
|---------------------------------|
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## Soldering Profile Curve

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



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