



# 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>100µF</b>     |
| Dimension; D x L mm                      | <b>6,3x5,4mm</b> |
| Impedance (Ω) max., at 20°C, 100kHz      | <b>1,0Ω</b>      |
| Ripple Current (mA rms) at 105°C, 100kHz | <b>140mA</b>     |

| Ordering Code |                |           |          |
|---------------|----------------|-----------|----------|
| <b>100</b>    | <b>Voltage</b> |           |          |
| <b>101</b>    | <b>Range</b>   |           |          |
| <b>D=</b>     | <b>C</b>       | <b>L=</b> | <b>0</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   |  |  |  |  |  |  |
|   | 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 |  |  |  |  |  |  |

|  |               |                 |     |    |    |    |    |    |  |  |  |  |  |  |
|--|---------------|-----------------|-----|----|----|----|----|----|--|--|--|--|--|--|
| <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 application of the rated voltage for 2000hrs at 105°C</b> | 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 |                                   |

**CHIP Low Impedance 105°C**

Part No.: **I15008**

|       |        |      |        |        |        |           |           |          |            |           |
|-------|--------|------|--------|--------|--------|-----------|-----------|----------|------------|-----------|
| DRW:  | Jason  | CHKD | Wilson | MATL:  | Wilson | TOLERANCE | Mason     | DATE     | 03.06.2014 | Customer: |
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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>$\mu$ F                              | Frequency |       |       |      |              |
|   |   | 50Hz      | 120Hz | 300Hz | 1KHz | 10KHz $\leq$ |
| $\varnothing$ 4 ~ $\varnothing$ 10mm    | 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 ~ $\varnothing$ 16mm | ~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 $\varnothing$ 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 | $\varnothing$ 8 x 6,2 | $\varnothing$ 8 x 10,5 | $\varnothing$ 10 x 10,5 | $\varnothing$ 10 x 13,5 | $\varnothing$ 12,5 x 13,5 | $\varnothing$ 12,5 x 16 | $\varnothing$ 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  $\varnothing$  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

**CHIP Low Impedance 105°C**

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

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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>100</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><br><b>N= NON ROHS Conform</b> | <b>TR= Tape Reel Packing</b><br><b>BU= Bulk-Ware</b> |  |  |
|-------------------------|----------------|---------------------|-------------------|-------------------|------------------------|--|--|--|--|

|                                 |
|---------------------------------|
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| Customer:                       |

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## Soldering Profile Curve

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



|                                 |               |
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| APPD: | Schumi |      |        | FINISH | Jamy   |           | Sheet No. | 7 from 7 |            |