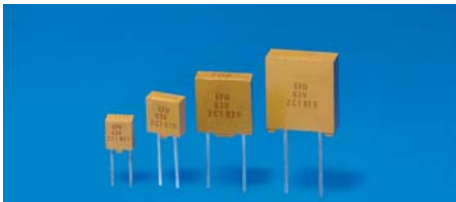
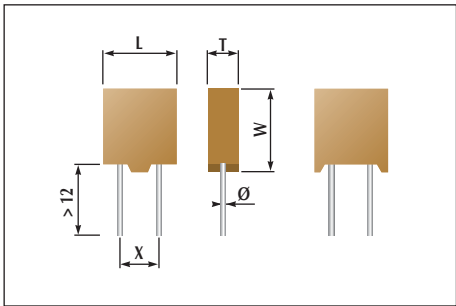


# TCN 30 TCN 31



Conformes aux spécifications des normes  
CECC 30700 et NF C 83132  
In accordance with the specifications of  
CECC 30700 and NF C 83132 standards



### CARACTERISTIQUES GENERALES

|                              |  |
|------------------------------|--|
| Diélectrique                 | Céramique classe 2                             |
| Technologie                  | Chips multicouches moulé résine époxy          |
| Catégorie climatique         | 55/125/56                                      |
| Caract. capacité temp.       | 2C1  |
| Température d'utilisation    | - 55°C + 125°C                                 |
| Tension nominale $U_{RC}$    | 50 V - 63 V - 100 V                            |
| Tension de tenue             | $2,5 U_{RC}$                                   |
| Tangente $\delta$ à 1 kHz    | $\leq 250 \cdot 10^{-4}$                       |
| Résistance d'isolement       |  |
| $C_R \leq 10\,000\text{ pF}$ | $\geq 100\,000\text{ M}\Omega$                 |
| $C_R > 10\,000\text{ pF}$    | $\geq 1\,000\text{ M}\Omega \cdot \mu\text{F}$ |
| <b>MARQUAGE</b>              |  |
| Capacité                     |  |
| Tolérance                    |  |
| Tension                      |  |
| Sous-classe                  |  |
| Date-code                    |  |

### MAIN CHARACTERISTICS

|                              |  |
|------------------------------|--|
| Dielectric                   | Ceramic class 2                                |
| Technology                   | Multilayer capacitor epoxy molded              |
| Climatic category            | 55/125/56                                      |
| Capac. temp. charact.        | 2C1  |
| Operating temperature        | - 55°C + 125°C                                 |
| Rated voltage $U_{RC}$       | 50 V - 63 V - 100 V                            |
| Test voltage                 | $2,5 U_{RC}$                                   |
| Tangent $\delta$ at 1 kHz    | $\leq 250 \cdot 10^{-4}$                       |
| Insulation resistance        |  |
| $C_R \leq 10\,000\text{ pF}$ | $\geq 100\,000\text{ M}\Omega$                 |
| $C_R > 10\,000\text{ pF}$    | $\geq 1\,000\text{ M}\Omega \cdot \mu\text{F}$ |
| <b>MARKING</b>               |  |
| Capacitance                  |  |
| Tolerance                    |  |
| Voltage                      |  |
| Sub-class                    |  |
| Date-code                    |  |

# CONDENSATEURS CERAMIQUE MOULES CLASSE 2

## MOLDED CERAMIC CAPACITORS CLASS 2

| Modèle normalisé / Standard model         |        |          |        |          |        |      |      |     |     | Code des valeurs de $C_R$<br>Capacitance value coded |    |     | Tolérances sur capacité<br>Tolerance on capacitance |  |  |
|---|--------|----------|--------|----------|--------|------|------|-----|-----|--|----|-----|---|--|--|
| CN 30                                     | CN 31  | CN 31 N  | CN 31  | CN 31 N  | CN 31  |      |      |     |     |  |    |     |   |  |  |
| Appellation commerciale / Commercial type |        |          |        |          |        |      |      |     |     |  |    |     |   |  |  |
| TCN 30                                    | TCN 31 | TCN 31 N | TCN 31 | TCN 31 N | TCN 31 |      |      |     |     |  |    |     |   |  |  |
| Boîtier / Case                            |        |          |        |          |        |      |      |     |     |  |    |     |   |  |  |
|   | J      | O        | Y      | I        | J      | O    |      |     |     |  |    |     |   |  |  |
| Dimensions / Dimensions (mm)              |        |          |        |          |        |      |      |     |     |  |    |     |   |  |  |
| L max.                                    | 7,5    | 10       | 3,5    | 5        |        | 7,5  | 10   |     |     |  |    |     |   |  |  |
| W max.                                    | 8,5    | 11       | 4,5    | 6        |        | 8,5  | 11   |     |     |  |    |     |   |  |  |
| T $\pm 0,2$                               | 2,5    | 3,5      | 2,5    | 2,5      |        | 2,5  | 3,5  |     |     |  |    |     |   |  |  |
| X $\pm 0,2$                               | 5,08   | 5,08     | 2,54   | 5,08     | 2,54   | 5,08 | 5,08 |     |     |  |    |     |   |  |  |
| $\emptyset -0,05 +10\%$                   | 0,6    | 0,8      | 0,6    | 0,6      |        | 0,6  | 0,8  |     |     |  |    |     |   |  |  |
| Tension nominale / Rated voltage          |        |          |        |          |        |      |      |     |     |  |    |     |   |  |  |
| $U_{RC}$ (V)                              | 50     | 63       | 63     | 100      | 100    | 100  | 100  | 100 | 100 |  | E6 | E12 | E24   |  |  |
| 100 pF                                    |        |          |        |          |        |      |      |     |     |  |    |     | 101   |  |  |
| 120                                       |        |          |        |          |        |      |      |     |     |  |    |     | 121   |  |  |
| 150                                       |        |          |        |          |        |      |      |     |     |  |    |     | 151   |  |  |
| 180                                       |        |          |        |          |        |      |      |     |     |  |    |     | 181   |  |  |
| 220                                       |        |          |        |          |        |      |      |     |     |  |    |     | 221   |  |  |
| 270                                       |        |          |        |          |        |      |      |     |     |  |    |     | 271   |  |  |
| 330                                       |        |          |        |          |        |      |      |     |     |  |    |     | 331   |  |  |
| 390                                       |        |          |        |          |        |      |      |     |     |  |    |     | 391   |  |  |
| 470                                       |        |          |        |          |        |      |      |     |     |  |    |     | 471   |  |  |
| 560                                       |        |          |        |          |        |      |      |     |     |  |    |     | 561   |  |  |
| 680                                       |        |          |        |          |        |      |      |     |     |  |    |     | 681   |  |  |
| 820                                       |        |          |        |          |        |      |      |     |     |  |    |     | 821   |  |  |
| 1000                                      |        |          |        |          |        |      |      |     |     |  |    |     | 102   |  |  |
| 1200                                      |        |          |        |          |        |      |      |     |     |  |    |     | 122   |  |  |
| 1500                                      |        |          |        |          |        |      |      |     |     |  |    |     | 152   |  |  |
| 1800                                      |        |          |        |          |        |      |      |     |     |  |    |     | 182   |  |  |
| 2200                                      |        |          |        |          |        |      |      |     |     |  |    |     | 222   |  |  |
| 2700                                      |        |          |        |          |        |      |      |     |     |  |    |     | 272   |  |  |
| 3300                                      |        |          |        |          |        |      |      |     |     |  |    |     | 332   |  |  |
| 3900                                      |        |          |        |          |        |      |      |     |     |  |    |     | 392   |  |  |
| 4700                                      |        |          |        |          |        |      |      |     |     |  |    |     | 472   |  |  |
| 5600                                      |        |          |        |          |        |      |      |     |     |  |    |     | 562   |  |  |
| 6800                                      |        |          |        |          |        |      |      |     |     |  |    |     | 682   |  |  |
| 8200                                      |        |          |        |          |        |      |      |     |     |  |    |     | 822   |  |  |
| 10 nF                                     |        |          |        |          |        |      |      |     |     |  |    |     | 103   |  |  |
| 12  |        |          |        |          |        |      |      |     |     |  |    |     | 123   |  |  |
| 15  |        |          |        |          |        |      |      |     |     |  |    |     | 153   |  |  |
| 18  |        |          |        |          |        |      |      |     |     |  |    |     | 183   |  |  |
| 22  |        |          |        |          |        |      |      |     |     |  |    |     | 223   |  |  |
| 27  |        |          |        |          |        |      |      |     |     |  |    |     | 273   |  |  |
| 33  |        |          |        |          |        |      |      |     |     |  |    |     | 333   |  |  |
| 39  |        |          |        |          |        |      |      |     |     |  |    |     | 393   |  |  |
| 47  |        |          |        |          |        |      |      |     |     |  |    |     | 473   |  |  |
| 56  |        |          |        |          |        |      |      |     |     |  |    |     | 563   |  |  |
| 68  |        |          |        |          |        |      |      |     |     |  |    |     | 683   |  |  |
| 82  |        |          |        |          |        |      |      |     |     |  |    |     | 823   |  |  |
| 100                                       |        |          |        |          |        |      |      |     |     |  |    |     | 104   |  |  |
| 120                                       |        |          |        |          |        |      |      |     |     |  |    |     | 124   |  |  |
| 150                                       |        |          |        |          |        |      |      |     |     |  |    |     | 154   |  |  |
| 180                                       |        |          |        |          |        |      |      |     |     |  |    |     | 184   |  |  |
| 220                                       |        |          |        |          |        |      |      |     |     |  |    |     | 224   |  |  |
| 270                                       |        |          |        |          |        |      |      |     |     |  |    |     | 274   |  |  |
| 330                                       |        |          |        |          |        |      |      |     |     |  |    |     | 334   |  |  |
| 390                                       |        |          |        |          |        |      |      |     |     |  |    |     | 394   |  |  |
| 470                                       |        |          |        |          |        |      |      |     |     |  |    |     | 474   |  |  |
| 560                                       |        |          |        |          |        |      |      |     |     |  |    |     | 564   |  |  |
| 680                                       |        |          |        |          |        |      |      |     |     |  |    |     | 684   |  |  |
| 820                                       |        |          |        |          |        |      |      |     |     |  |    |     | 824   |  |  |
| 1 µF                                      |        |          |        |          |        |      |      |     |     |  |    |     | 105   |  |  |
| 1,2                                       |        |          |        |          |        |      |      |     |     |  |    |     | 125   |  |  |
| 1,5                                       |        |          |        |          |        |      |      |     |     |  |    |     | 155   |  |  |
| 1,8                                       |        |          |        |          |        |      |      |     |     |  |    |     | 185   |  |  |

■ Gamme normalisée / Values in standard      ■ Extension / Values out of standard

Le suffixe N est valable pour les boîtiers Y et I soit entraxe : 5,08 mm (pour boîtiers Y : W + 1,8 mm).  
N suffix available for Y and I cases, lead spacing : 5,08 mm (for Y cases : W + 1,8 mm).

### Exemple de codification à la commande / How to order

|   |  |                      |                         |   |   |
|---|--|----------------------|-------------------------|---|---|
| Appellation commerciale<br>Comm. type                               | N* : suffix<br>N* : suffix                       | W : RoHS<br>W : RoHS | Capacité<br>Capacitance | Tension nominale<br>Rated voltage                         | Niveau de fiabilité (voir p. 6)<br>Reliability level (see p. 6) |
| TCN 31  | -  | -                    | -                       | 33 nF   | 10 %  |
| Boîtier (si extension de gamme)<br>Case (if values out of standard) | F, R : Niveau de qualité<br>F, R : Quality level |                      | Tolérance<br>Tolerance  | B : Option bande (>500 ex.)<br>B : Band option (>500 ex.) |   |