

Thick film series - Standard

Type: CDF

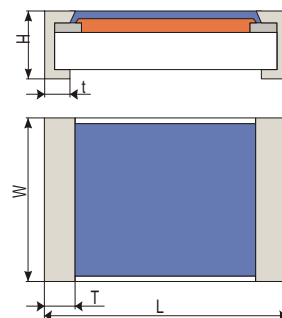
Sizes: 0402, 0603, 0805, 1206

Characteristics:

- Chip resistors in thick film technology
- Resistance area coated with glass and varnish passivation
- High stability and reliability
- Tight tolerances ($\geq 0,5\%$) – low temperature coefficient
- RoHS-conform
- Customer specific barcodes available - also in 2D
- All sizes can be manufactured with the following contact variants
 - ⇒ Electroplated alloy resistant tinned
 - ⇒ Contact with low rest permeability -N, suitable only for reflow soldering method
 - ⇒ Epoxy bondable contact –K
 - ⇒ Special corrosive gas resistant contact –S, Sulfur resistance verified according to ASTM B 809

Dimensions (in mm):

| Size | L Length | | W Width | | H Depth | | t Contact back | | T Contact front | |
|-------------|-------------|------|------------|------|------------|------|----------------------|------|-----------------------|------|
| | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max |
| 0402 | 0,95 | 1,10 | 0,45 | 0,60 | 0,25 | 0,40 | 0,10 | 0,35 | 0,05 | 0,35 |
| 0603 | 1,50 | 1,70 | 0,75 | 0,95 | 0,35 | 0,55 | 0,10 | 0,50 | 0,10 | 0,50 |
| 0805 | 1,85 | 2,15 | 1,10 | 1,40 | 0,35 | 0,65 | 0,15 | 0,60 | 0,15 | 0,60 |
| 1206 | 2,90 | 3,35 | 1,45 | 1,75 | 0,35 | 0,65 | 0,25 | 0,75 | 0,15 | 0,75 |



Packaging units:

| Reel Ø | Card tape acc. EN 60286-3 |
|--------------------------------------|-------------------------------------|
| 180 mm | 5 T pcs. 10 T pcs. for size 0402 |
| 330 mm | 10 T pcs. 20 T pcs. |
| Samples possible up to 50 pcs./value | |

Ordering information:

| CDF | - N | 0603 | 10k | 1% | 50ppm/K | K | P | 5 (optional) |
|------|---|------------------------------|-----------------|-------------|-----------|---|-------------------------|---|
| Type | Contact | Size | R- Value | ± Tolerance | ± TCR | Marking | Packaging | pcs. / Reel (T pcs.) |
| CDF | Standard (without add.) -N (non magnetic) -K (epoxy bondable) -S (corrosive gas resistant) | 0402 0603 0805 1206 | 1R to 10M | 0,5 1,0 | 50 100 | K- with (from size 0603) N- without (only size 0402) | P- Card tape S- Bulk | Depends on size and packaging unit |

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Technical data – depending on size:

| Size | Nominal voltage U _{max} (V) | Load P ₇₀ (W) | R-Range | R-Tolerance (± %) | TCR (± ppm/K) | Packaging | | |
|------|---|-----------------------------|----------|----------------------|------------------|-----------|---|---|
| | | | | | | P | B | S |
| 0402 | 50 | 0,063 | 1R - 10M | 1,0 | 50 / 100 | x | | x |
| 0603 | 75 | 0,100 | 1R - 10M | 0,5 / 1,0 | 50 / 100 | x | | x |
| 0805 | 150 | 0,125 | 1R - 10M | 0,5 / 1,0 | 50 / 100 | x | | x |
| 1206 | 200 | 0,250 | 1R - 10M | 0,5 / 1,0 | 50 / 100 | x | | x |

Technical data - general:

| Technical data | |
|--|--------------------------------|
| Operating temperature range | -55°C ... +155°C |
| Climatic category acc. EN 60068 | 55 / 155 / 56 |
| Solderability acc. EN 60068-2-58 | 245°C 3s |
| Soldering heat resistance acc. EN 60068-2-58 | ±(0,5% + 0,05R) at 260°C 10s |
| Long time stability | |
| Storage 155°C / 1000h | ± (1,0% + 0,05R) |
| Endurance P ₇₀ / 70°C / 1000h | ± (0,5% + 0,05R) |
| Damp heat, steady state (56d / 40°C / 96%) | ± (1,0% + 0,05R) |

Data, unless specified, acc. EN 140401-802.