

### Networks - Thin film series

Type: CMA

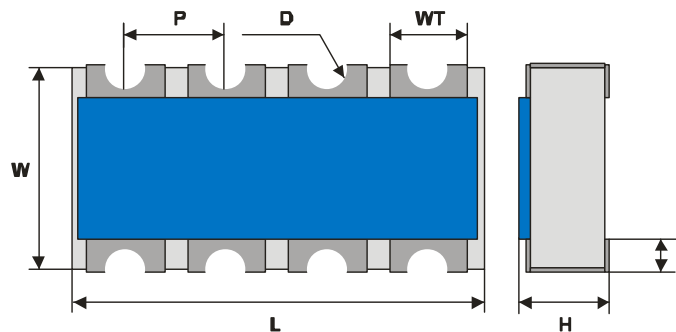
Sizes: 1206-4 (4 x 0603)

#### Characteristics:

- Chip resistors in thin film technology
- Four isolated resistors with 2 circuit variants
- Concave contact
- Resistance area coated with surface passivation
- High stability and reliability
- RoHS-conform
- Sulfur resistance verified according to ASTM B 809
- Customer specific barcodes available - also in 2D
- All sizes can be manufactured with the following contact variants
  - ⇒ Electroplated pure tin
  - ⇒ Contact with low rest permeability -N, suitable only for reflow soldering method (The recommended storage time should not exceed 1 year after delivery)
  - ⇒ Epoxy bondable contact -K

#### Dimensions (in mm):

L Length	W Width	H Depth	t Contact back	WT Contact width	P Contact spacing	D Contact radius
3,2 ± 0,10	1,6 ± 0,10	0,6 ± 0,10	0,3 ± 0,10	0,5 ± 0,10	0,8	0,3



#### Packaging units:

Reel Ø	Card tape acc. EN 60286-3
180 mm	5 T pcs.
330 mm	10 T pcs. 20 T pcs.
Samples on request	

#### Ordering information:

Circuit type 1								
CMA	-N	1206-4	4k7	1%	50ppm/K	N	P	10 (optional)
Type	Contact	Size	R-Value R1;R2;R3;R4	± Tolerance	± TCR	Marking	Packaging	pcs. / Reel (T pcs.)
CMA	-Standard (without add.) -N (non magnetic) -K (epoxy bondable)	1206-4	100R to 25k	0,25 0,5 1	25 50	N- only without	P- Card tape S- Bulk	5 10 20

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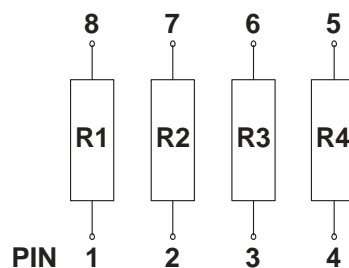
Circuit type 2									
CMA	-N	1206-4	4k7	6k8	1%	50ppm/K	N	P	10 (optional)
Type	Contact	Size	R-Value R1;R4	R-Value R2;R3	± Tolerance	± TCR	Marking	Packaging	pcs./Reel (T pcs.)
CMA	-Standard (without add.) -N (non magnetic) -K (epoxy bondable)	1206-4	100R to 25k	100R to 25k	0,25 0,5 1	25 50	N- only without	P- Card tape S- Bulk	5 10 20

#### Technical data – depending on size:

Size	Nominal voltage $U_{max}$ (V)	Load $P_{70}$ (W)	R-Range	Absolute R-Tolerance (± %)	Matching R-Tolerance (± %)	Absolute TCR (± ppm/K)	Tracking TCR (± ppm/K)	Packaging		
								P	B	S
1206-4	50	4 x 0,063	100R – 25k	± 0.25	0,1	± 25	25	x		x
1206-4	50	4 x 0,063	100R – 25k	± 0.5	0,25	± 25	25	x		x
1206-4	50	4 x 0,063	100R – 25k	± 1.0	0,5	± 25	25	x		x
1206-4	50	4 x 0,063	100R – 25k	± 0.25	0,1	± 50	50	x		x
1206-4	50	4 x 0,063	100R – 25k	± 0.5	0,5	± 50	50	x		x
1206-4	50	4 x 0,063	100R – 25k	± 1,0	0,5	± 50	50	x		x

#### Circuit type:

Type	CMA 1206-4
1	R1=R2=R3=R4
2	R1=R4 ; R2=R3
Ratio $R_{min}/R_{max}$ on request	



#### 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	± ( 0,1% + 0,05R ) at 260°C 10s
Long time stability	
Storage 155°C / 1000h	± ( 0,5% + 0,05R )
Endurance $P_{70}$ / 70°C / 1000h	± ( 0,25% + 0,05R )
Damp heat, steady state (56d / 40°C / 93%)	± ( 0,25% + 0,05R )

Data, unless specified, acc. EN 140401-801.