

## Metallized Polypropylene (PP) - Capacitors for DC-Link Applications. Capacitances from 140 $\mu\text{F}$ to 8250 $\mu\text{F}$ . Rated Voltages from 450 VDC to 1500 VDC.

### Special Features

- Very high volume/capacitance ratio
- Self-healing, internal safety disconnecter
- Safe contact configurations by screwable plates
- Dry construction without electrolyte or oil
- Very low dissipation factor
- Negative capacitance change versus temperature
- Very low dielectric absorption
- According to RoHS 2011/65/EU
- Customer-specific tabs, capacitances or voltages on request
- 105° C version on request

### Typical Applications

As intermediate circuit capacitor e. g. in high power converter technology

### Construction

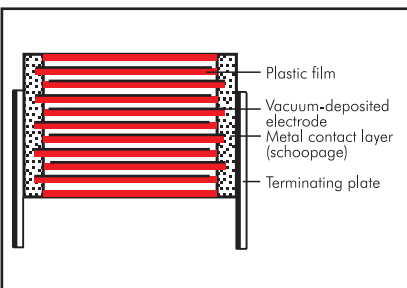
#### Dielectric:

Polypropylene (PP) film

#### Capacitor electrodes:

Vacuum-deposited

#### Internal construction:



#### Encapsulation:

Solvent resistant, flame-retardant plastic case with PU seal

#### Terminations:

Tinned plates, customized plate configurations are possible.

#### Marking:

Colour: Black. Marking: Gold.

### Electrical Data

**Capacitance range:** 140  $\mu\text{F}$  to 8250  $\mu\text{F}$

#### Rated voltages:

450 VDC, 900 VDC, 1500 VDC

**Capacitance tolerance:**  $\pm 10\%$

#### Operating temperature:

$-55^\circ\text{C}$  to  $+85^\circ\text{C}$  ( $+105^\circ\text{C}$  on request)

#### Insulation resistance at $+20^\circ\text{C}$ :

$\geq 30\,000$  sec ( $\text{M}\Omega \times \mu\text{F}$ )

Measuring voltage: 100 V/1 min.

**Self-inductance:**  $\leq 50$  nH depending on tab configuration

**ESR at  $+20^\circ\text{C}$ :** See General Data.

**Test voltage:**  $1.5 U_r$ , 10 sec

**Dielectric absorption:** 0.05 %

#### Voltage derating:

A derating factor of 1.35% per K must be applied from  $+70^\circ\text{C}$  for AC currents ( $I_{\text{rms}}$ )

#### Reliability:

Operational life  $> 100\,000$  hours at  $70^\circ\text{C}$  hot spot

Failure rate  $< 50$  fit (hot spot  $\leq 70^\circ\text{C}$ )

#### Specific dissipation:

See General Data.

**Standards:** in accordance with IEC 61071

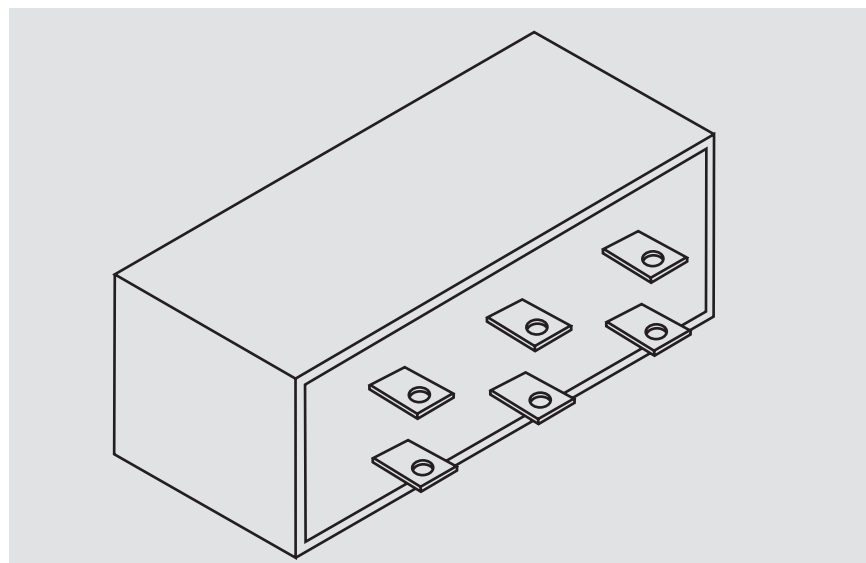
### Mounting Recommendation

Excessive mechanical strain, e.g. pressure or shock onto the capacitor body, is to be avoided during mounting and usage of the capacitors. When fixing the capacitor the screw torque is to be limited to max. 5 Nm.

### Packing

Transportation-safe packing in cardboard boxes.

For further details and graphs please refer to Technical Information.



## Continuation

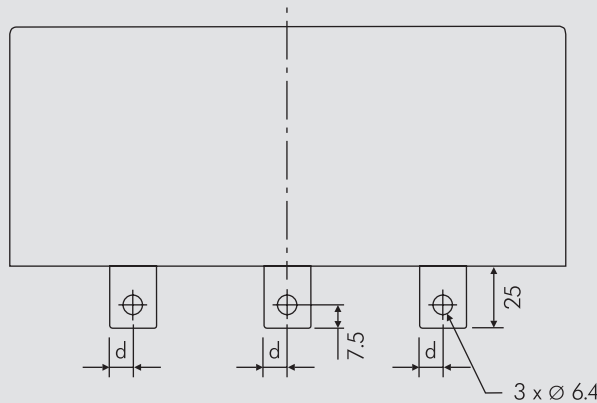
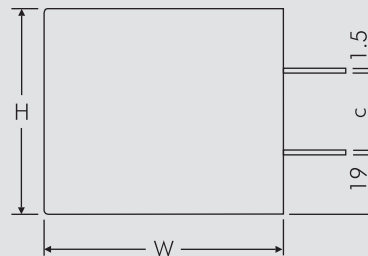
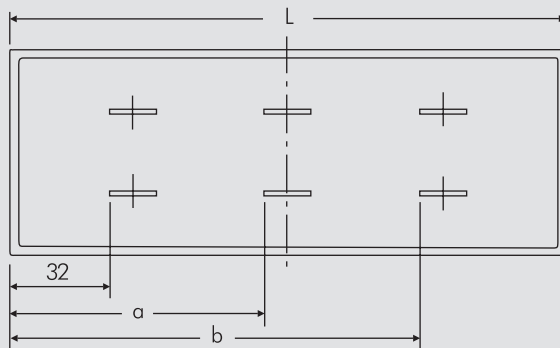
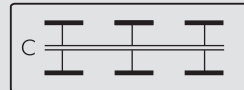
### General Data

$U_R$	$C_N$	$E_N$ $W_S$	Size (mm)			$I_{rms}$ (max.) A	$\hat{I}^*$ kA	$I_S^*$ kA	ESR (1 kHz) m $\Omega$	$R_{th}^*$ K/W	Approx. weight g	Part number
			W	H	L							
450 VDC	1440 $\mu$ F	146	84	66	179	100	4.6	18.6	0.3	2.8	1220	DCHCH07144JB00KS00
	2400 "	243	84	66	291	170	7.7	30.9	0.2	1.8	1985	DCHCH07240JH00KS00
	3000 "	304	107	91	179	120	6.7	26.7	0.3	2.0	2145	DCHCH07300JC00KS00
	4950 "	501	130	114	179	140	8.7	34.9	0.3	1.5	3265	DCHCH07495JE00KS00
	5000 "	506	107	91	291	190	11.1	44.5	0.2	1.3	3485	DCHCH07500JI00KS00
	8250 "	835	130	114	291	210	14.5	58.1	0.2	1.1	5305	DCHCH07825JJ00KS00
900 VDC	450 $\mu$ F	182	84	66	179	90	2.2	8.8	0.5	2.8	1220	DCHCN06450JB00KS00
	750 "	304	84	66	291	140	3.7	14.6	0.3	1.8	1985	DCHCN06750JH00KS00
	940 "	381	107	91	179	100	2.9	11.6	0.5	2.0	2145	DCHCN06940JC00KS00
	1500 "	608	130	114	179	110	3.5	14.1	0.5	1.5	3265	DCHCN07150JE00KS00
	1560 "	632	107	91	291	160	4.8	19.3	0.3	1.3	3485	DCHCN07156JI00KS00
	2600 "	1053	130	114	291	180	6.1	24.4	0.3	1.1	5305	DCHCN07260JJ00KS00
1500 VDC	140 $\mu$ F	158	84	66	179	60	1.2	4.9	0.9	2.8	1220	DCHCS06140JB00KS00
	230 "	259	84	66	291	100	2.0	8.1	0.6	1.8	1985	DCHCS06230JH00KS00
	280 "	315	107	91	179	80	1.5	6.1	0.8	2.0	2145	DCHCS06280JC00KS00
	460 "	518	130	114	179	90	1.8	7.3	0.8	1.5	3265	DCHCS06460JE00KS00
	470 "	529	107	91	291	130	2.5	10.2	0.5	1.3	3485	DCHCS06470JI00KS00
	790 "	889	130	114	291	150	3.1	12.5	0.4	1.1	5305	DCHCS06790JJ00KS00

\* General guide

Customer-specific tabs, capacitances or voltages on request

External wiring:



W	H	L	a	b	c	d
84	66	179	82	132	25	7.5
107	91	179	82	132	50	7.5
130	114	179	82	132	73	7.5
84	66	291	135.5	239	25	10
107	91	291	135.5	239	50	10
130	114	291	135.5	239	73	10

Dims. in mm. Case tolerances: general tolerances in accordance with ISO 2768-1 C (approximate)

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