

# Metallized Polypropylene Film Capacitors (MKP) B 32656-S

## Plastic Case

### Wound MKP capacitors

#### Construction

- Dielectric: polypropylene
- Wound capacitor technology with internal series connection for  $V_R \geq 1250$  Vd
- Plastic case (UL 94 V-0)
- Epoxy resin sealing

#### Features

- High pulse strength
- High contact reliability
- Very low inductance

#### Typical application

- IGBT circuits

#### Terminals

- Strap terminals, tinned

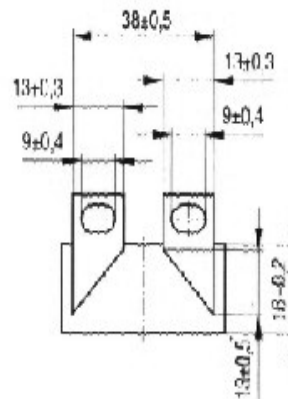
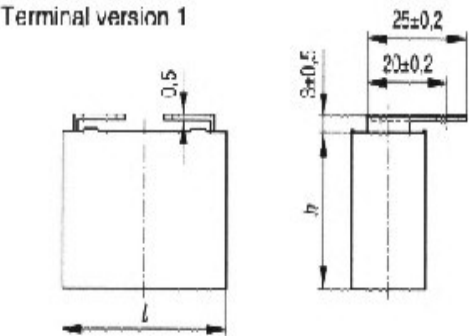
#### Marking

Manufacturer's logo lot number, style (MKP), rated capacitance (codes), capacitance tolerance (code letter), rated dc voltage date of manufacture (codes)

#### Delivery mode

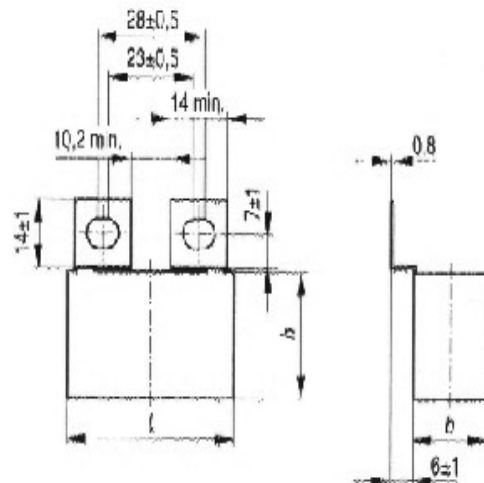
Bulk

Terminal version 1



KMK0500-2

Terminal version 2



KMK0500

Dimensions in mm

## Ordering codes and packing units

<b>V<sub>R</sub></b> ( <b>V<sub>rms</sub></b> <b>f&lt;60 kHz</b> )	<b>Cr</b>	<b>Maximum dimensions</b> <b>b x h x l (mm)</b>	<b>Ordering code</b>	<b>Terminal version</b>	<b>Packing units (pcs)</b> <b>Untaped</b>
1000 Vdc (500 Vac)	0,68 μF	16,0 x 28,5 x 42,0	B32656-S0684-+503	1	48
	1,0 μF	20,0 x 39,5 x 42,0	B32656-S0105-+502	1	24
	1,0 μF	31,0 x 26,5 x 42,0	B32656-S0105-+500	2	32
	1,5 μF	31,0 x 26,5 x 42,0	B32656-S0155-+501	2	32
1250 Vdc (500 Vac)	0,22 μF	4,0 x 25,0 x 42,0	B32656-S7224-+504	1	60
	1,0 μF		B32656-S7105-+500	2	27

Capacitance tolerance:  $\pm 20\% \cong M$ ,  $\pm 10\% \cong K$ ,  $\pm 5\% \cong J$

## Technical data

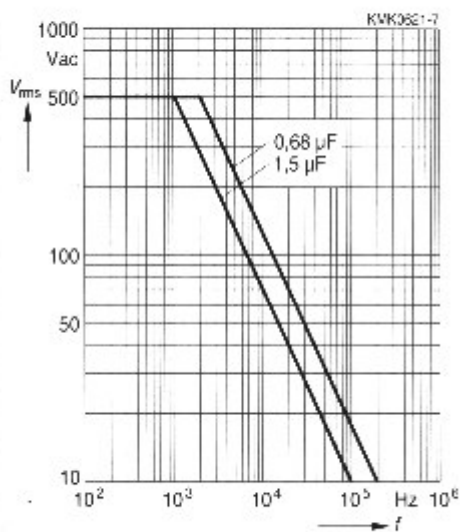
Climatic category in accordance with IEC 60068-1 Lower category temperature <i>T<sub>min</sub></i> Upper category temperature <i>T<sub>max</sub></i> Damp heat test Limit values after damp heat test	55/100/56  -55° C +100°C 56 days/40°C/93% relative humidity Capacitance change ( $\Delta C/C$ ) Dissipation factor change $\Delta \tan \delta$  Insulation resistance <i>R<sub>is</sub></i> or time constant $\tau = CR \cdot R_{is}$	    $\leq 3\%$ $\leq 0.5 \cdot 10^{-3}$ (at 1 kHz) $\leq 1.0 \cdot 10^{-3}$ (at 10 kHz) $\geq 50\%$ of minimum as-delivered values
Reliability Reference conditions Failure rate Service life Failure criteria: Total failure Failure due to variation of parameters	0,5 . VR ; 40° C 1.10 \ -9/h = 1 fit 200 000 h  Short circuit open circuit Capacitance change ( $\Delta C/C$ ) Dissipation factor change $\Delta \tan \delta$ Insulation resistance <i>R<sub>is</sub></i> or time constant $\tau = CR \cdot R_{is}$	    $> 10\%$ 4 . upper limit values $< 1500 M\Omega$ ( $CR \leq 0,33 \mu F$ ) $< 500 s$ ( $CR > 0,33 \mu F$ )



<b>Pulse handing capability</b>	
Maximum permissible voltage change per unit of time for non-sinusoidal voltages (pulse, sawtooth)	
VR	Max. rate of voltage rise $V_{pp}/\tau$ in $V/\mu s$ (for $V_{pp}=V_R$ )
1000 Vdc	90
1250 Vdc	140
For $V_{pp} < V_R$ , the permissible voltage rise rate value $V_{pp}/\tau$ may be multiplied by the factor $V_R/V_{pp}$ .	
VR	Pulse characteristic $k_0$ in $V^2/\mu s$ (for $V_{pp} \leq V_R$ )
1000 Vdc	180 000
1250 Vdc	350 000

**Permissible ac voltage  $V_{rms}$  versus frequency  $f$**

1000 Vdc/ 500 Vac



1250 Vdc/ 500 Vac

