



Metallized Polyester (MKT/MFT)

Series/Type: **B32582**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B32582		30.08.2002	31.10.2002	31.03.2003
B32583		30.08.2002	31.10.2002	31.03.2003
B32584		30.08.2002	31.10.2002	31.03.2003

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Metallized Polyester Film Capacitors (MFT)

B 32 582

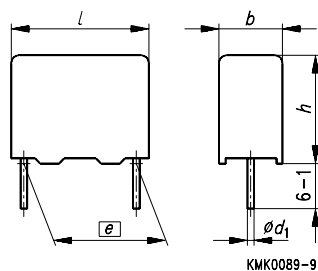
Plastic Case

... B 32 584

MFT pulse capacitors with highest possible contact reliability

Construction

- Dielectric: polyethylene terephthalate (polyester)
- Wound capacitor technology
- Metallized film and metal foils internally connected in series
- Plastic case (UL 94 V-0)
- Epoxy resin sealing



Dimensions in mm

Features

- Very high pulse strength
- Highest possible contact reliability
- Self-healing properties
- Perfectly adapted to - and tested with - 1 kV and 3 kV EPCOS switching spark gaps¹⁾
- High operation temperature

Lead spacing $e \pm 0,4$	Diameter d_1	Type
15,0	0,8	B 32 582
22,5	0,8	B 32 583
27,5	0,8	B 32 584

Typical applications

- Ignition devices for gas discharge lamp appliances used in car headlight systems, video projection systems and backlight-TV systems

Terminals

- Parallel wire leads, tinned

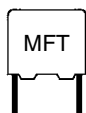
Marking

Manufacturer's logo,
lot number, style and type (FT5xx),
rated capacitance (coded),
capacitance tolerance (code letter),
rated dc voltage,
date of manufacture (coded)

Delivery mode

Bulk (untaped)
Taped (Ammo pack or reel)
For notes on taping, refer to chapter "Taping and packing", page 274.

¹⁾ Special MKT capacitors (stacked-film technology) optimized for ignition circuits using lower switching voltages are available on request.



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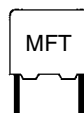
Overview of available types

Lead spacing	15 mm	22,5 mm	27,5 mm
Type	B 32 582	B 32 583	B 32 584
1,5 nF	3000 Vdc		
2,2 nF			
3,3 nF			
4,7 nF			
6,8 nF		3000 Vdc	
10 nF			
15 nF			
22 nF			
33 nF			
47 nF			1250 Vdc
56 nF			
68 nF			



B 32 582

... B 32 584



Ordering codes and packing units, lead spacing 15 mm

V_R (V_{rms} , $f \leq 60$ Hz)	C_R	Maximum dimensions $b \times h \times l$ (mm)	Ordering code ¹⁾	Packing units (pcs)		
				Ammo pack	Reel	Untaped
3000 Vdc	1,5 nF	7,0 × 12,5 × 18	B32582-A9152-+***	830	900	1000
	2,2 nF	7,0 × 12,5 × 18	B32582-A9222-+***	830	900	1000
	3,3 nF	8,5 × 14,5 × 18	B32582-A9332-+***	680	700	500
	4,7 nF	9,0 × 17,5 × 18	B32582-A9472-+***	640	700	500

Ordering codes and packing units, lead spacing 22,5 mm

V_R (V_{rms} , $f \leq 60$ Hz)	C_R	Maximum dimensions $b \times h \times l$ (mm)	Ordering code ¹⁾	Packing units (pcs)		
				Ammo Pack	Reel	Untaped
3000 Vdc	6,8 nF	8,5 × 16,5 × 26,5	B32583-A9682-+***	480	500	510
	10 nF	10,5 × 16,5 × 26,5	B32583-A9103-+***	390	400	540

Ordering codes and packing units, lead spacing 27,5 mm

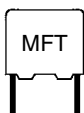
V_R (V_{rms} , $f \leq 60$ Hz)	C_R	Maximum dimensions $b \times h \times l$ (mm)	Ordering code ¹⁾	Packing units (pcs)		
				Ammo Pack	Reel	Untaped
1250 Vdc	47 nF	11,0 × 21,0 × 31,5	B32584-A7473-+***	–	350	320
	56 nF	11,0 × 21,0 × 31,5	B32584-A7563-+***	–	350	320
	68 nF	11,0 × 21,0 × 31,5	B32584-A7683-+***	–	350	320

Capacitance tolerance: $\pm 10\% \hat{=} K, \pm 5\% \hat{=} J$

1) + Code letter for capacitance tolerance

*** Code number for packing: Ammo pack = 289, reel = 189

The ordering code for untaped components ends after the tolerance code letter.



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Technical data

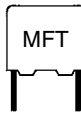
Climatic category in accordance with IEC 60068-1	40/120/56
Lower category temperature T_{\min}	- 40 °C
Upper category temperature T_{\max}	+ 120 °C
Damp heat test	56 days/40 °C/93% relative humidity
Limit values after damp heat test	Capacitance change $ \Delta C/C $ $\leq 5\%$ Dissipation factor change $\Delta \tan \delta$ $\leq 5 \cdot 10^{-3}$ (at 1 kHz) Insulation resistance R_{is} $\geq 50\%$ of minimum as-delivered values
Reliability:	
Reference conditions	0,5 · V_R ; 40 °C
Failure rate	$2 \cdot 10^{-9}/h = 2$ fit For a conversion table for other operating conditions and temperatures, refer to chapter "Quality assurance", page 327.
Service life	200 000 h
Failure criteria:	
Total failure	Short circuit or open circuit
Failure due to variation of parameters	Capacitance change $ \Delta C/C $ $> 10\%$ Dissipation factor $\tan \delta$ $> 4 \cdot$ upper limit value Insulation resistance R_{is} < 1500 M Ω
DC test voltage	1,6 · V_R , 2 s
Category voltage V_C	$T \leq 85$ °C: $V_C = 1,0 \cdot V_R$ or $1,0 \cdot V_{rms}$
Operation with dc voltage or ac voltage V_{rms} up to 60 Hz	$T = 100$ °C: $V_C = 0,8 \cdot V_R$ or $0,8 \cdot V_{rms}$ $T = 120$ °C: $V_C = 0,5 \cdot V_R$ or $0,5 \cdot V_{rms}$
Category voltage for short operating periods	$T \leq 100$ °C: $V_C = 1,25 \cdot V_R$ or $1,0 \cdot V_{rms}$ for max. 2000 h $T \leq 125$ °C: $V_C = 0,6 \cdot V_R$ or $0,5 \cdot V_{rms}$ for max. 1000 h
Dissipation factor $\tan \delta$ (in 10^{-3}) at 20 °C (upper limit values)	at 1 kHz: $8 \cdot 10^{-3}$ at 10 kHz: $15 \cdot 10^{-3}$ at 100 kHz: $25 \cdot 10^{-3}$
Insulation resistance R_{is} at 20 °C, rel. humidity $\leq 65\%$ (minimum as-delivered values)	> 10 G Ω



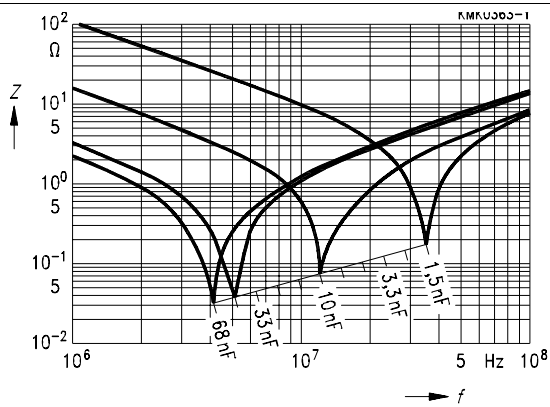
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MFT

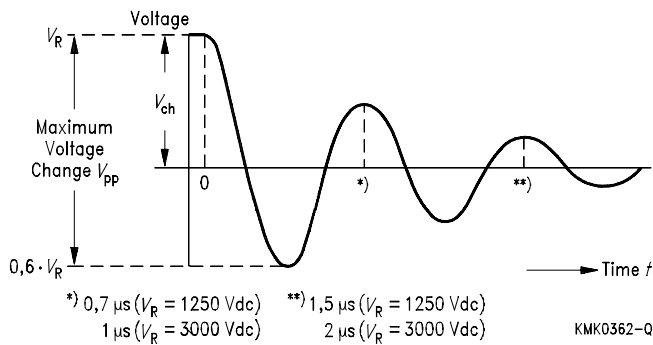


Impedance Z
versus
frequency f
(typical values)



Pulse handling capability

The capacitors are especially manufactured and tested to suit their intended applications.
Typical permissible loads:



V_R	Max. rate of voltage rise V_{pp}/τ in $\text{V}/\mu\text{s}$ (for $V_{pp} = V_R$)		
	Lead spacing		
	15 mm	22,5 mm	27,5 mm
1250 Vdc	—	—	10 000
3000 Vdc	20 000	20 000	—

Capability of 100 000 switches (ON/OFF).

Herausgegeben von EPCOS AG

Marketing Kommunikation, Postfach 80 17 09, 81617 München, DEUTSCHLAND

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