

Not for new design
X2 capacitors with small dimensions
Rated ac voltage 275 V, 50/60 Hz¹⁾
Construction

- Dielectric: polyester (MKT)
- Internal series connection
- Plastic case (UL 94 V-0)
- Epoxy resin sealing, flame-retardant

Features

- Self-healing properties

Terminals

- Parallel wire leads, tinned
- Standard lead lengths see table.
Other lead lengths available upon request.

Marking

Manufacturer's logo, lot number, date code, rated capacitance (coded), capacitance tolerance (code letter), rated ac voltage, type number, interference suppression sub-class (X2), style (MKT), self-healing (SH), climatic category, awarded marks of conformity.

Delivery mode

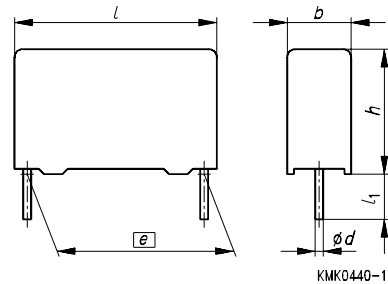
Bulk (untaped)
 Taped (Ammono pack or reel)
 or notes on taping, [refer to chapter "Taping and packing", page 274.](#)

Marks of conformity

Marks of conformity	Standards	Certificate
	EN 132400 / IEC 384-14, 2nd edition	9516010-01
	UL 1283 (250 V)	E157153
	UL 1414	E97863/95NK32316
	CSA C22.2 No. 0; 1 (250 V)	LR 59709
	CSA C22.2 No. 0; 8 (250 V)	LR 59709

for 300 V (lead spacing = 37,5 mm):

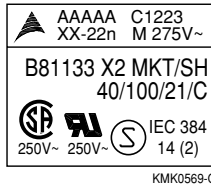
	DIN EN 132400 / IEC 384-14, 2nd edition	18643-4670-0011/315A3 ZS/HV
	CSA C22.2 No. 0; 8	LR59709-35
	UL 1283	E157153



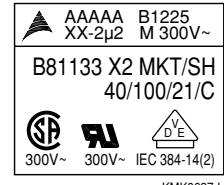
Lead spacing $e \pm 0,4$	Lead diameter $\varnothing d$ (mm)	Lead length l_1 (mm)	
$\leq 27,5$ mm	0,8	6 – 1	26 ± 2
37,5 mm	1,0	6 – 1	30 ± 2

Lead spacing $\leq 27,5$ mm

Lead spacing = 37,5 mm



KMK0569-Q



KMK0627-L

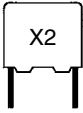
1) Rated ac voltage for lead spacing 37,5 mm = 300 V, 50/60 Hz

Ordering codes and packing units

Lead spacing $\square e \pm 0,4$ mm	C_R	Maximum dimensions $b \times h \times l$ (mm)	Ordering code ¹⁾	Packing units (pcs)			
				Ammo pack	Reel	Untaped Lead length	
						6 mm	26 mm
15	22 nF	$5,0 \times 10,5 \times 18,0$	B81133-C1223-M***	1170	1300	1000	1000
	33 nF	$5,0 \times 10,5 \times 18,0$	B81133-C1333-M***	1170	1300	1000	1000
	47 nF	$6,0 \times 11,0 \times 18,0$	B81133-C1473-M***	960	1100	1000	1000
	68 nF	$7,0 \times 12,5 \times 18,0$	B81133-C1683-M***	830	900	1000	800
	0,10 μ F	$8,5 \times 14,5 \times 18,0$	B81133-D1104-M***	680	700	500	500
	0,15 μ F	$8,5 \times 14,5 \times 18,0$	B81133-D1154-M***	680	700	500	500
22,5	0,10 μ F	$6,0 \times 15,0 \times 26,5$	B81133-C1104-M***	680	700	720	500
	0,15 μ F	$7,0 \times 16,0 \times 26,5$	B81133-C1154-M***	580	600	630	500
	0,22 μ F	$8,5 \times 16,5 \times 26,5$	B81133-C1224-M***	480	500	510	450
	0,33 μ F	$10,5 \times 16,5 \times 26,5$	B81133-D1334-M***	390	400	540	350
	0,47 μ F	$11,0 \times 20,5 \times 26,5$	B81133-D1474-M***	370	350	510	300
27,5	0,33 μ F	$11,0 \times 21,0 \times 31,5$	B81133-C1334-M***	—	350	320	200
	0,47 μ F	$11,0 \times 21,0 \times 31,5$	B81133-C1474-M***	—	350	320	200
	0,68 μ F	$12,5 \times 21,5 \times 31,5$	B81133-C1684-M***	—	300	280	200
	1,0 μ F	$14,0 \times 24,5 \times 31,5$	B81133-C1105-M***	—	250	260	150
	1,5 μ F	$18,0 \times 27,5 \times 31,5$	B81133-C1155-M***	—	—	200	100
37,5 ²⁾	2,2 μ F	$18,0 \times 32,5 \times 41,5$	B81133-B1225-M***	—	—	90	70

Capacitance tolerance: $\pm 20 \% \hat{=} M$ (closer tolerances upon request)

- 1) Replace the *** by the code number for the required lead length or packing.
000 = lead length 6 mm (untaped)
026 = lead length 26 mm (untaped)
289 = taped, Ammo pack
189 = taped, reel
- 2) Rated ac voltage for lead spacing 37,5 mm = 300 V, 50/60 Hz

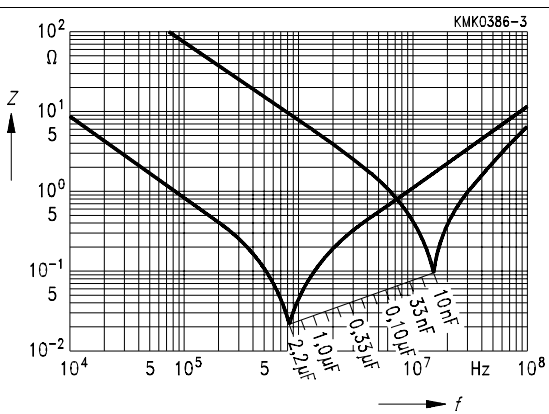


B 81 133

275 Vac

Not for new design

Technical data

Climatic category in accordance with IEC 60068-1	40/100/21		
Lower category temperature $T_{\min}$	– 40 °C		
Upper category temperature $T_{\max}$	+ 100 °C		
Passive flammability category in acc. with IEC 40 (CO) 752	C		
Damp heat test	21 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 or time constant $\tau = C_R \cdot R_{is}$ as-delivered values		
Permissible continuous ac voltage	275 V (50/60 Hz)		
Permissible continuous dc voltage	630 V		
DC test voltage	1800 V, 2 s		
Dissipation factor $\tan \delta$ (in 10^{-3}) at 20 °C (upper limit values)		$C_R \leq 0,1 \mu F$	$0,1 \mu F < C_R \leq 1 \mu F$
	at 1 kHz	8	8
	10 kHz	15	15
	100 kHz	30	–
Insulation resistance R_{is} or time constant $\tau = C_R \cdot R_{is}$ at 20 °C, rel. humidity $\leq 65 \%$ (minimum as-delivered values)	$C_R \leq 0,33 \mu F$		$C_R > 0,33 \mu F$
	30 000 M Ω		10 000 s
Impedance Z versus frequency f (typical values)			

Pulse handling capability

Maximum permissible voltage change per unit of time for non-sinusoidal voltages (pulse, sawtooth).

V_R	Max. rate of voltage rise V_{pp}/τ in V/ μ s (for $V_{pp} = \hat{V}_R$)			
	Lead spacing			
	15 mm	22,5 mm	27,5 mm	37,5 mm
275 Vac	60	30	20	8

For $V_{pp} < \hat{V}_R$, the permissible voltage rise rate V_{pp}/τ may be multiplied by the factor $\hat{V}_R/V_{pp}$. Also refer to the calculation example in chapter "General technical information", page 302.

V_R	Pulse characteristic k_0 in V ² / μ s (for $V_{pp} \leq \hat{V}_R$)			
	Lead spacing			
	15 mm	22,5 mm	27,5 mm	37,5 mm
275 Vac	45 000	20 000	12 000	55 000

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