

# EMI Suppression Capacitors

## X2 / 275 V<sub>ac</sub>

**X2 capacitors with small dimensions**  
**Rated ac voltage 275 V, 50/60 Hz**

### Construction

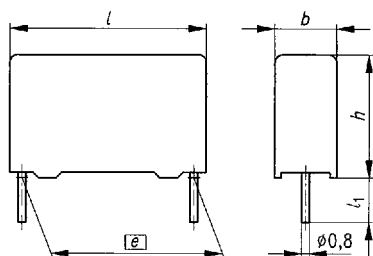
- Dielectric: polyester (MKT)
- Internal series connection
- Plastic case (UL 94 V-0)
- Epoxy resin sealing, flame-retardant

### Features

- The capacitors meet the requirements of IEC 384-14, 2nd edition
- Self-healing properties

### Terminals

- Parallel wire leads, tinned
- Two standard lead lengths available:  
6 mm und 26 mm
- Other lead lengths available upon request



SSB0841-W DataSheet4U.com

Lead length $l_1$ mm	6 - 1	26 ± 2
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### Marking

DataSheet4U.com

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

### Delivery mode

Bulk (untaped)

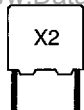
Taped (Ammo and reel)

For notes on taping refer to page 278.

### Marks of conformity

Marks of conformity	Standards	Marks of conformity	Standards
	VDE 0565 part 1 / 12.79 <sup>1)</sup>		IEC 384-14 / 1981 <sup>1)</sup>
	SEV 1055 / 1978 <sup>1)</sup>		IEC 384-14 / 1981 <sup>1)</sup>
	Stærkstrømreglementets Afsnit 21 <sup>1)</sup>		CEI 40-7 / VI-1980 <sup>1)</sup>
	NEMKO 132 / 85 <sup>1)</sup>		UL 1283 <sup>1)</sup>
	SEN 432901 <sup>1)</sup>		UL 1414 (application made for $V_R = 125 V_{ac}$ )
			CSA C22.2 No. 0 (application made for $V_R = 125 V_{ac}$ )
			EN 132400 / IEC 384-14, 2nd edition (application made for $V_R = 275 V_{ac}$ )

<sup>1)</sup> Approved for  $V_R = 250 V_{ac}$



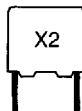
**B 81 133**  
**275 V<sub>ac</sub>**

### Ordering codes and packing units

Lead spacing [E] ±0,4 mm	C <sub>R</sub>	Maximum dimensions <i>b × h × l</i>  (mm)	Ordering code <sup>1)</sup>	Packing units (pcs)			
				Ammo pack	Reel	Untaped Lead length	
						6 mm	26 mm
15	22 nF	5,0 × 10,5 × 18,0	B81133-C1223-M***	1180	1300	1000	1000
	33 nF	5,0 × 10,5 × 18,0	B81133-C1333-M***	1180	1300	1000	1000
	47 nF	6,0 × 11,0 × 18,0	B81133-C1473-M***	1000	1100	1000	1000
	68 nF	7,0 × 12,5 × 18,0	B81133-C1683-M***	840	900	1000	1000
	0,10 μF	8,5 × 14,5 × 18,0	B81133-D1104-M***	690	700	500	500
	0,15 μF	8,5 × 14,5 × 18,0	B81133-D1154-M***	690	700	500	500
22,5	0,10 μF	6,0 × 15,0 × 26,5	B81133-C1104-M***	690	700	720	500
	0,15 μF	7,0 × 16,0 × 26,5	B81133-C1154-M***	590	600	630	500
	0,22 μF	8,5 × 16,5 × 26,5	B81133-C1224-M***	500	500	510	500
	0,33 μF	10,5 × 16,5 × 26,5	B81133-D1334-M***	400	400	540	500
	0,47 μF	11,0 × 20,5 × 26,5	B81133-D1474-M***	380	350	510	400
27,5	0,33 μF	11,0 × 21,0 × 31,5	B81133-C1334-M***	–	350	320	250
	0,47 μF	11,0 × 21,0 × 31,5	B81133-C1474-M***	–	350	320	250
	0,68 μF	12,5 × 21,5 × 31,5	B81133-C1684-M***	–	300	280	250
	1,0 μF	14,0 × 24,5 × 31,5	B81133-C1105-M***	–	–	260	250
	1,5 μF	18,0 × 27,5 × 31,5	B81133-C1155-M***	–	–	200	200
32,5	2,2 μF	20,0 × 31,0 × 36,5	B81133-C1225-M***	–	–	125	125

Capacitance tolerance: ± 20 % ≐ 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 (taping refer to page 278)  
 189 = taped, reel (taping refer to page 278)



### Technical data

Climatic category in accordance with IEC 68-1	40/100/21			
Lower category temperature $T_{\min}$	- 40 °C			
Upper category temperature $T_{\max}$	+ 100 °C			
Damp heat test	21 days/40 °C/93 % relative humidity			
Limit values after damp heat test	Capacitance change $\Delta C/C$	≤ 5 %		
	Dissipation factor change $\Delta \tan \delta$	≤ 5 · 10 <sup>-3</sup> (at 1 kHz)		
	Insulation resistance $R_{is}$ or time constant $\tau = C_R \cdot R_{is}$	≥ 50 % of minimum as-delivered values		
Permissible continuous ac voltage	275 V (50/60 Hz)			
Permissible continuous dc voltage	630 V			
DC test voltage	1700 V, 2 s			
Dissipation factor $\tan \delta$ (in 10 <sup>-3</sup> ) at 20 °C (upper limit values)		$C_R \leq 0,1 \mu\text{F}$	$0,1 \mu\text{F} < C_R \leq 1 \mu\text{F}$	$C_R > 1 \mu\text{F}$
	at 1 kHz	8	8	10
	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 ≤ 65 % (minimum as-delivered values)	$C_R \leq 0,33 \mu\text{F}$	$C_R > 0,33 \mu\text{F}$		
	30 000 MΩ	10 000 s		