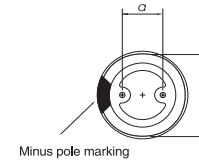
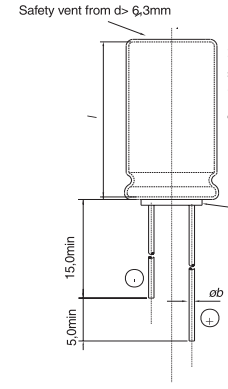




Construction

- Radial leads
- Charge-discharge proof, polar
- Aluminum case with insulating sleeve
- Minus pole marking on case surface
- Case with safety vent from diameter 8 mm
- Stand off rubber seal

Features

- Very low impedance at high frequency
- Very low equivalent series resistance *ESR*
- High ripple current capability
- Wide temperature range

Applications

- For use in output circuits of switch-mode power supplies of compact design
- For professional industrial eletronics, telecommunications and data processing equipment

Delivery Mode (packing)

Special terminals configurations and packing

- Bulk
- Ammo
- Cut
- Kinked
- PAPR

Refer to page 20 for information and examples on how to order them.

Specifications and characteristics in brief

Type		B41859
Rated voltage Surge voltage	U_N U_S	6,3 ... 50 Vdc 1,15 · U_N
Rated capacitance Capacitance tolerance	C_N	100 ... 4 700 µF ± 20 % (M)
Useful life 105 °C, U_N; Iac$_{max}$	hrs	 > 4 000 h
Fraction failure	%	± 1 % (during the useful life)
Failure rate	fit	± 100 fit (1 fit = 1 · 10^{-9}/h)

Voltage endurance test	hrs	2 000 h, 105°C (at U_N) Evaluation criteria: $\Delta C/C \leq \pm$ 30 % of initial measured value *tan d* ≤ 2 times initial specified value $I_L \leq$ initial specified value
Leakage current I_{lka} (5 min, 20°C)		$I_{lka} \leq 0{,}01\mu A \cdot \left(\frac{C_N . U_N}{\mu F \quad V}\right)$
Climatic category	UCT/ LCT	in accordance with IEC 68-1 55/105/56 (-55°C/+105°C, 56 days of damp heat, stead state test)
Standards		IEC 384-4 DIN 45 910 part 12
Vibration resistance		in accordance with IEC 68-2-6, test Fc: displacement amplitude 0,75 mm, frequency range 10 ... 2000 Hz, acceleration max. 10 *g*, duration 3 x 2 h

Overview of available types

U_N (Vdc)	6,3	10	16	25	35	50
C_N(µF)	Case dimensions ∅*d* x *l* (mm)					
100				8 x 11	8 x 11	10 x 16
220			8 x 11	10 x 16	10 x 16	10 x 20
330		8 x 11	10 x 16	10 x 16	10 x 20	12,5 x 25
470	8 x 11	10 x 16	10 x 16	10 x 20	10 x 20	16 x 20
680	8 x 11					
1 000	10 x 16	10 x 20	10 x 20	12,5 x 25	12,5 x 25 16 x 25	18 x 31,5
1500	10 x 20					
2 200	12,5 x 25	12,5 x 25	16 x 20	16 x 31,5	18 x 35	
3 300		16 x 20	16 x 31,5	18 x 35	18 x 40	
4 700		16 x 31,5	18 x 35	18 x 40		

Other voltage and capacitance ratings are also available upon request.

Technical data and ordering codes

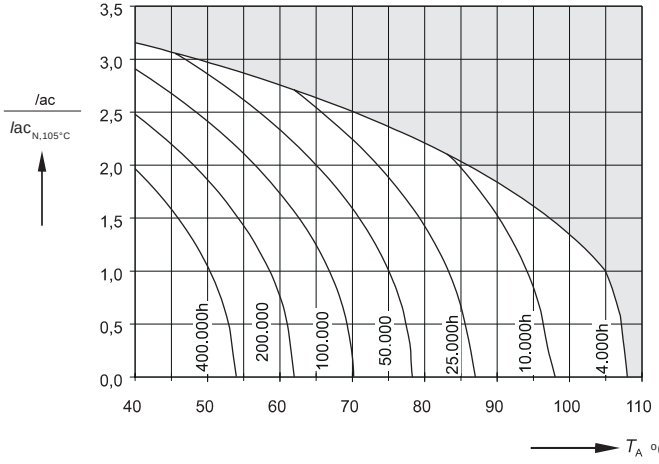
U_N	C_N	Case Dimensions	I_{Lmax}	$tan\delta_{max}$	ESR_{max}	Z_{max}	Iac_{max}	Ordering code
	120 Hz		5 min	120 Hz	120 Hz	100 kHz	100 kHz	
	20°C	∅d x l	20°C	20°C	20°C	20°C	105°C	
Vdc	µF	mm	µA		Ω	Ω	mA (rms)	Short Code
								B41859-
6,3	470	8 x 11	30	0,22	0,78	0,190	445	-A2477-M
	680	8 x 11	43	0,22	0,54	0,150	555	-A2687-M
	1 000	10 x 16	63	0,22	0,36	0,068	780	-A2108-M
	1500	10 x 20	95	0,22	0,24	0,034	1200	-A2158-M
	2 200	12,5 x 25	139	0,24	0,18	0,030	1400	-A2228-M
10	330	8 x 11	33	0,19	0,95	0,170	440	-A3337-M
	470	10 x 16	47	0,19	0,67	0,120	640	-A3477-M
	1 000	10 x 20	100	0,19	0,31	0,062	1120	-A3108-M
	2 200	12,5 x 25	220	0,21	0,16	0,034	1620	-A3228-M
	3 300	16 x 20	330	0,23	0,12	0,030	1700	-A3338-M
	4 700	16 x 31,5	470	0,25	0,09	0,024	2210	-A3478-M
16	220	8 x 11	35	0,16	1,21	0,120	530	-A4227-M
	330	10 x 16	53	0,16	0,80	0,100	640	-A4337-M
	470	10 x 16	75	0,16	0,56	0,084	840	-A4477-M
	1 000	10 x 20	160	0,16	0,27	0,050	1340	-A4108-M
	2 200	16 x 20	352	0,18	0,14	0,030	1800	-A4228-M
	3 300	16 x 31,5	528	0,20	0,10	0,024	2310	-A4338-M
	4 700	18 x 35	752	0,22	0,08	0,018	2790	-A4478-M
25	100	8 x 11	25	0,14	2,32	0,180	340	-A5107-M
	220	10 x 16	55	0,14	1,06	0,120	620	-A5227-M
	330	10 x 16	83	0,14	0,70	0,084	830	-A5337-M
	470	10 x 20	118	0,14	0,49	0,062	1080	-A5477-M
	1 000	12,5 x 25	250	0,14	0,23	0,034	1690	-A5108-M
	2 200	16 x 31,5	550	0,16	0,12	0,024	2310	-A5228-M
	3 300	18 x 35	825	0,18	0,09	0,018	2740	-A5338-M
	4 700	18 x 40	1175	0,20	0,07	0,015	3090	-A5478-M
35	100	8 x 11	35	0,12	1,99	0,120	500	-A7107-M
	220	10 x 16	77	0,12	0,90	0,084	820	-A7227-M
	330	10 x 20	116	0,12	0,60	0,062	1090	-A7337-M
	470	10 x 20	165	0,12	0,42	0,052	1200	-A7477-M
	1 000	12,5 x 25	350	0,12	0,20	0,034	1940	-F7108-M
	1 000	16 x 25	350	0,12	0,20	0,030	1960	-A7108-M
	2 200	18 x 35	770	0,14	0,11	0,018	2850	-A7228-M
	3 300	18 x 40	1155	0,16	0,08	0,015	3150	-A7338-M
50	100	10 x 16	50	0,10	1,66	0,130	640	-A6107-M
	220	10 x 20	110	0,10	0,75	0,080	1050	-A6227-M
	330	12,5 x 25	165	0,10	0,50	0,062	1400	-A6337-M
	470	16 x 20	235	0,10	0,35	0,048	1240	-A6477-M
	1 000	18 x 31,5	500	0,10	0,17	0,030	2310	-A6108-M

Preferred types.

How to determine the ordering code

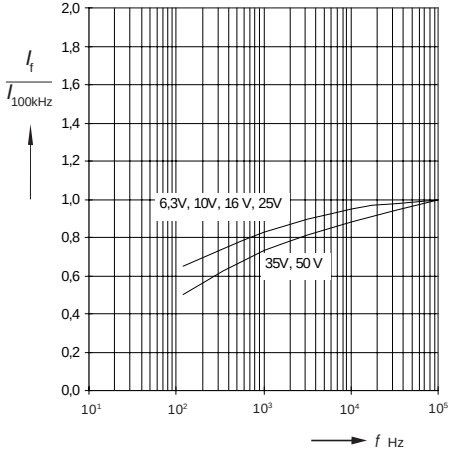
To obtain the required ordering code, prefix the type number to the short code.
E.g.: B41859-A7227-M

Useful life
versus temperature T_A (*) under ripple operating conditions [1)]
U_N = 6,3 ... 50 Vdc

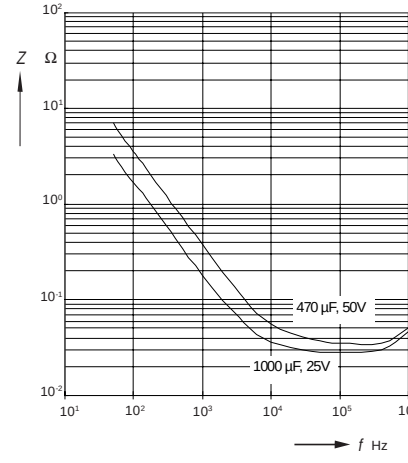


(*) "T_A" – Must be considered as the temperature of the capacitor's place in the board/circuit, in maximum operate conditional.

Permissible ripple current *I*ac
versus frequency *f*



Impedance *Z*
versus frequency *f*
Typical values at 20°C



[1)] Refer to page 42 for an explanation on how to interpret the useful life graph.