



UltraCap

Single cell
5 F/ 2.3 V

Series/Type:

Ordering code: B49100A1503Q000

Date:

June 2004

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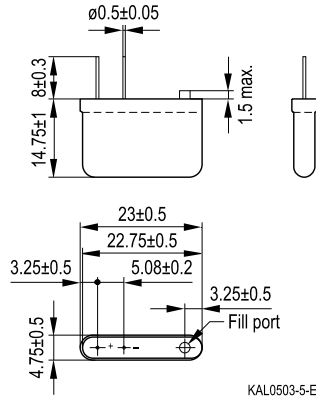
Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

Features

- Lead terminals
- Power type
- Insulated with polyurethane
- Short-circuit-proof

Note

- Please pay attention to the safety, transport and waste disposal instructions in chapter "Cautions"

Dimensional drawing


KAL0503-5-E

Dimensions in mm

Electrical specifications

Rated capacitance	($T_A = 25\text{ °C}$; DCC) ¹⁾	C_R	5	F
Tolerance of C_R			-10/+30	%
Rated voltage	($T_A = 25\text{ °C}$)	V_R	2.3	V
Specific power	(matched load)		1.2	kW/kg
Specific power	(matched load)		3.9	kW/l
Stored energy	($V = V_R$)	E	13.2	J
Specific energy	($V = V_R$)		0.7	Wh/kg
Specific energy	($V = V_R$)		2.2	Wh/l
Surge voltage		V_{surge}	2.7	V
Maximum series resistance	($T_A = 25\text{ °C}$; 1 kHz)	ESR	200	mΩ
Maximum series resistance	($T_A = 25\text{ °C}$; 50 mHz)	ESR _{DC}	330	mΩ
Weight			5.5	g
Volume			0.0017	l
Operating temperature range		T_{op}	-30/+70	°C
Storage temperature	($V = 0\text{ V}$)	T_{st}	-40/+70	°C
Lifetime (hours) ²⁾	($T_A = 25\text{ °C}$; $V = V_R$)		90000	h
Lifetime (cycles) ³⁾	($T_A = 25\text{ °C}$; $I = 0.5\text{ A}$)		500000	cycles

1) DCC: Discharging with constant current.

2) Requirements: $|\Delta C/C_R| \leq 30\%$, $\text{ESR} \leq 2$ times of specified limit, $I_{\text{leak}} \leq 2$ times of initial value.

3) Requirements: $|\Delta C/C_R| \leq 30\%$, $\text{ESR} \leq 2$ times of specified limit, $I_{\text{leak}} \leq 2$ times of initial value (1 cycle: charging to V_R , 30 s rest, discharging to $V_R/2$, 30 s rest).