Conductive Polymer Aluminum Solid Capacitors (V Chip)

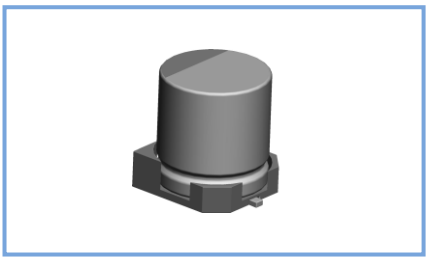
RoHS

PEVA Series

MERITEK

FEATURES

- Standard SMD type
- Rated voltage: $2.5V_{DC}$ ~$25V_{DC}$
- Endurance: 2000hours at 105ºC
- Suitable for DC-DC converters, Voltage regulators and decoupling applications.



SPECIFICATIONS

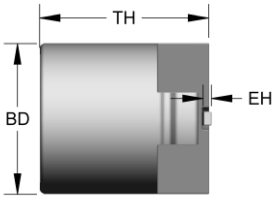
Item	Characteristic	
Category Temperature Range	-55℃ ~ +105℃	
Rated Voltage Range	$2.5V_{DC}$ ~ $25V_{DC}$	
Surge Voltage	Rated voltage x 1.15V	at +105°C
Capacitance Tolerance	M=±20%	at 120Hz, 20ºC
Leakage Current	Shall not exceed values shown in standard ratings	at 20ºC after 2 minutes
Dissipation Factor (tan δ)	0.12 (max)	at 120Hz, 20ºC
Temperature Stability	Impedance change Z(-55ºC)/Z(+20ºC)≤1.25 Z(+105ºC)/Z(+20ºC)≤1.25	 at -55°C, 100kHz at +105°C, 100kHz
Endurance	**Appearance:** no significant damage **Capacitance change:** ≤ ±20% of the initial value **DF(tanδ):** ≤ 150% of the initial specified value **ESR:** ≤ 150% of the initial specified value **Leakage current:** ≤ the initial specified value	The specifications shall be satisfied when the capacitors are restored to 20ºC after the rated voltage is applied for 2000hours at 105ºC
Damp Heat, Steady State	**Appearance:** no significant damage **Capacitance change:** ≤ ±20% of the initial value **DF(tanδ):** ≤ 150% of the initial specified value **ESR:** ≤ 150% of the initial specified value **Leakage current:** ≤ the initial specified value	The specifications shall be satisfied when the capacitors are restored to 20ºC after subjecting them to store at 60ºC, 90%~95% R.H. for 1000hours, without DC applied.
Surge Voltage	**Appearance:** no significant damage **Capacitance change:** ≤ ±20% of the initial value **DF(tanδ):** ≤ 150% of the initial specified value **ESR:** ≤ 150% of the initial specified value **Leakage current:** ≤ the initial specified value	The capacitors shall be subjected to 1,000 cycles each consisting of charge with the surge voltages specified at 105ºC for 30 seconds through a protective resistor (R=1kΩ) and discharge for 5 minutes 30 seconds

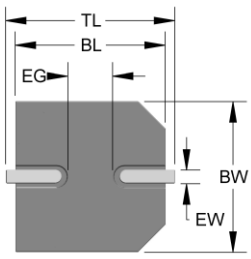
NOTE:

If any doubt arises, measure the leakage current after following voltage treatment -
Voltage treatment: DC rated voltage is applied to the capacitors for 60 minutes at 105ºC

DIMENSIONS (mm)

Size code	0506	0604	0606	0807	0810
BD+0.5 (max)	5.0	6.3	6.3	8.0	8.0
TH±0.2	5.8	4.3	5.8	6.8	9.7
BW±0.2	5.3	6.6	6.6	8.3	8.3
BL±0.2	5.3	6.6	6.6	8.3	8.3
TL±0.2	6.0	7.3	7.3	9.0	9.0
EW	0.5~0.8	0.5~0.8	0.5~0.8	0.5~0.8	0.8~1.1
EG±0.2	1.4	2.1	2.1	2.9	2.9





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STANDARD RATINGS

Item	Working Voltage(SV) (Vdc)	Capacitance (uF)	Size Code	Leakage Current (uA)	ESR[1] (mΩ), max	Rated Ripple Current[2] (mArms)
PEVA2R5331M0506	2.5(2.9)	330	0506	165	21	2670
PEVA2R5331M0604	2.5(2.9)	330	0604	700	17	2300
PEVA2R5331M0606	2.5(2.9)	330	0606	413	15	3160
PEVA2R5391M0506	2.5(2.9)	390	0506	700	10	3900
PEVA2R5391M0606	2.5(2.9)	390	0606	292	10	3900
PEVA2R5561M0606	2.5(2.9)	560	0606	700	10	3900
PEVA2R5561M0606	2.5(2.9)	560	0606	700	16	3500
PEVA4R0221M0606	4.0(4.6)	220	0606	440	25	2500
PEVA4R0331M0606	4.0(4.6)	330	0606	660	15	3160
PEVA6R3101M0606	6.3(7.2)	100	0606	315	27	2400
PEVA6R3151M0606	6.3(7.2)	150	0606	473	15	2700
PEVA6R3221M0506	6.3(7.2)	220	0506	500	15	3150
PEVA6R3221M0604	6.3(7.2)	220	0604	700	17	2300
PEVA6R3221M0606	6.3(7.2)	220	0606	277	15	3160
PEVA6R3331M0606	6.3(7.2)	330	0606	416	17	3390
PEVA10V121M0606	10(11.5)	120	0606	600	25	2530
PEVA16V470M0506	16(18.4)	47	0506	376	35	2070
PEVA16V470M0606	16(18.4)	47	0606	376	25	2500
PEVA16V680M0604	16(18.4)	68	0604	544	40	2450
PEVA16V101M0506	16(18.4)	100	0506	320	27	3000
PEVA16V101M0606	16(18.4)	100	0606	320	24	2490
PEVA16V271M0807	16(18.4)	270	0807	864	22	3300
PEVA16V271M0810	16(18.4)	270	0810	864	16	4070
PEVA25V150M0604	25(25)	15	0604	300	55	1650
PEVA25V220M0604	25(25)	22	0604	275	45	2350
PEVA25V270M0606	25(25)	27	0606	135	40	2100
PEVA25V470M0606	25(25)	47	0606	235	30	2500

NOTE:
1. Test condition: 20ºC, 100kHz~300kHz
2. Test condition: 105ºC, 100kHz

PART NUMBERING SYSTEM

