Rubycon

HYBRID POLYMER CAPACITORS *-Unique Design Technology* **PSV**

PSV SERIES

NEW

♦FEATURES

- High Ripple Current, Ultra Low ESR
- High Temperature Operation
- Surface Mount Type
- Life: 3000 Hours at 135˚C
- Stable ESR over Temperature
- AEC-Q200, 85˚C/85% RH, RoHS Compliant
- Non Electrolyte Design *(Longer Life vs. Conventional Types)*
- Suitable for Automotive and High Frequency/Current Applications

♦SPECIFICATIONS

Item	Characteristics
Temperature Range	-55~+135℃ (150℃[1])
Rated Voltage Range	25~63Vdc
Capacitance Tolerance	±20%（20℃, 120Hz）
Leakage Current (MAX)	I=0.01CV after 2 minutes or 3μA (whichever is greater) I=（μA） Leakage Current　C=（μF） Capacitance　V=（Vdc） Rated Voltage
Dissipation Factor (MAX)	（Vdc） Rated Voltage: 25 / 35 / 50 / 63 tanδ: 0.14 / 0.12 / 0.10 / 0.08 （20℃, 120Hz）
Endurance (Life)	After applying rated voltage with rated ripple current for 3000 Hours at 135℃, the capacitors shall meet the following Criteria:
Biased Humidity/Temperature 85℃/85% RH	After applying rated voltage for 2000 hours at 85℃ and humidity of 85%, the capacitors shall meet the following Criteria:
Over Temperature Durability[1]	After applying rated voltage for 300 hours at 150℃, the capacitors shall meet the following Criteria:
Criteria	Capacitance Change: Within ±30% of the initial value. Dissipation Factor: Not more than 120% of the specified value. ESR: Not more than the value listed in the standard size list Leakage Current: Not more than the specified value.
Low Temperature Stability Impedance Ratio (MAX)	Z(-55℃)/Z(+20℃) ≦ 2.0　Z(-25℃)/Z(+20℃) ≦ 1.5 (100kHz)

♦PART NUMBER CONSTRUCTION

□□□	PSV	□□□	M	□□□	ϕDxL
Rated Voltage	Series	Capacitance	Tolerance	Option	Case Size

∗Specifications subject to change without notice.

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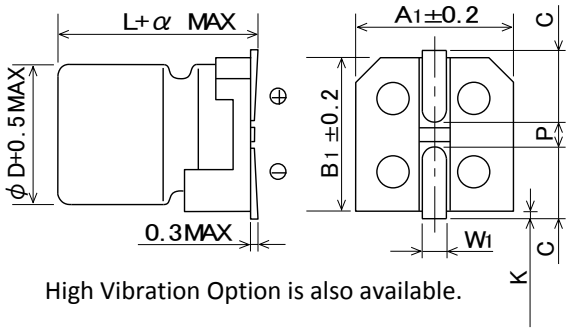
♦DIMENSIONS



High Vibration Option is also available.

ϕD	L	A1	B1	C	W1	P	K	α
8	10.5	8.3	8.3	2.9	0.8～1.1	3.1	0.5 Max	0
10	10.5	10.3	10.3	3.2	0.8～1.1	4.5	0.5 Max	0

♦AVAILABLE OPTIONS

Rated Voltage (VDC)	Capacitance (μF)	Size ϕD×L (mm)	Rated Ripple Current mA rms 135℃ 100 kHz	ESR (mΩ max) Initial (After Endurance Test)			
				20℃		-40℃	
				10kHz	100kHz	10kHz	100kHz
25	220	8X10.5	2400	26(33)	17(22)	21(27)	14(18)
	330	10X10.5	3000	24(30)	16(20)	20(26)	13(17)
35	150	8X10.5	2400	26(33)	17(22)	21(27)	14(18)
	270	10X10.5	3000	24(30)	16(20)	20(26)	13(17)
50	68	8X10.5	1870	36(45)	24(30)	30(39)	20(26)
	100	10X10.5	2400	33(42)	22(28)	27(36)	18(24)
63	33	8X10.5	1650	45(60)	30(40)	36(48)	24(32)
	56	10X10.5	2100	42(55)	28(37)	34(45)	23(32)

●Frequency Correction Coefficient for Ripple Current

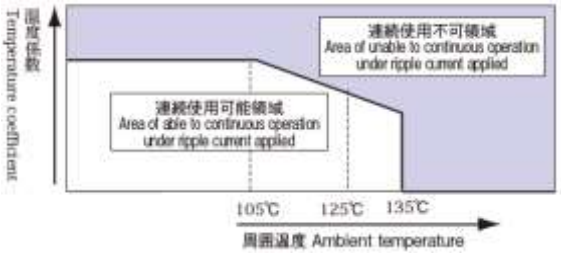
f (Hz) Frequency	100≦f<1k	1k≦f<10k	10k≦f<20k	20k≦f<50k	50k≦f<100k	100k≦
Coefficient	0.10	0.40	0.75	0.85	0.90	1.00

●Temperature Coefficient for Ripple Current

T (℃) Temperature	135	125	≤ 105
(IMAX/I0) Coefficient	1.0	1.3	1.8

Temperature Coefficient: IMAX/I0

Coefficient indicating the maximum permissible ripple current (IMAX) that can be continuously applied beyond the rated ripple current (I0). Estimated lifetime complies with our lifetime calculation formula.



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