



ZS small size, Middle and high voltage

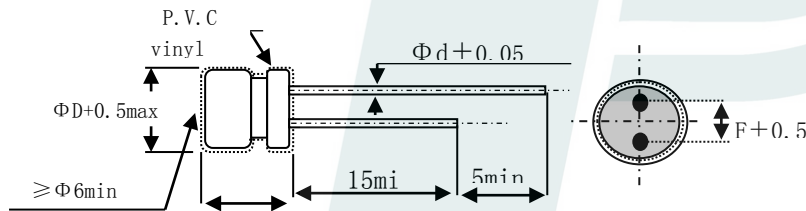
☆ Has characteristics of withstanding high temperature 105°C and reliability.

☆ Suitable for communication equipment and industrial measurement instruments.

■ Specifications

Operating temperature range	-25~+85°C					
Rated voltage range	200~450V DC					
Nominal capacitance range	4.7~330μF					
Capacitance tolerance	±20%(25°C, 120Hz)					
Leakage current	$I \leq 0.03C_R U_R + 30(\mu A)$ 2minutes					
Tg δ	U _R (V)	200	250	350	400	450
Dissipation	tg δ	0.13	0.15	0.20	0.20	0.20
Temperature characteristics	U _R (V)	200	250	350	400	450
	Z-25°C / Z+20	7	10	7	7	7
Load life	After applying rated voltage with specified ripple current for 2000hours at +85°C and then resumed 16hours; Capacitance change: Within ±20% of the initial measured value Leakage current: Not more than the initial specified value Dissipation factor: Not more than 150% of the initial specified value					
Shelf life	After storage for 1000hours at +85°C then resumed 16hours; Capacitance change: With ±15% of the initial measured value Leakage current: Not more than 200% of the initial specified value Dissipation factor: Not more than 120% of the initial specified value					

■ Case size table



Unit:mm

ΦD	8	10	12	13	16	18	21
F	3.5	5.0		7.5		10	
Φd	0.5	0.6		0.8			
α	1.0	1.5		2.0			

■ Nominal capacitance, rated voltage, rated ripple current and case size table

C _R (μF)	ltem code	U _R (V)		200 (2D)		250 (2E)		350 (2V)		400 (2G)		450 (2W)	
		D×L (mm)	Ripple (mA)	D×L (mm)	Ripple (mA)	D×L (mm)	Ripple (mA)	D×L (mm)	Ripple (mA)	D×L (mm)	Ripple (mA)		
1	010			6×11	13					8×12	22	8×12	24
2.2	2R2			6×12	19					8×12	24	8×12	26
3.3	3R3			8×12	26					8×12	29	8×12	31
4.7	4R7	8×12	35	8×12	35	8×12	38	8×12	34	10×16	42		
10	100	10×13	44	10×13	49	10×16	54	10×16	55	13×20	60		
22	220	10×16	81	10×20	85	12×25	88	13×20	98	16×25	106		
33	330	10×20	110	13×20	125	13×20	125	13×25	130	16×25	130		
47	470	10×20	125	13×25	145	16×25	140	16×25	160	16×30	165		
100	101	16×25	200	16×25	220	18×35	220	18×30	230	18×35	240		
150	151	16×25	240	18×30	250			18×35	350	18×45	360		
220	221	16×30	360	18×30	388			18×45	582				