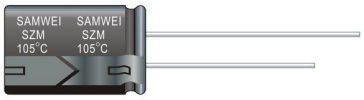
SZM SERIES(5mmL高,+105℃，Low Impedance低阻抗)

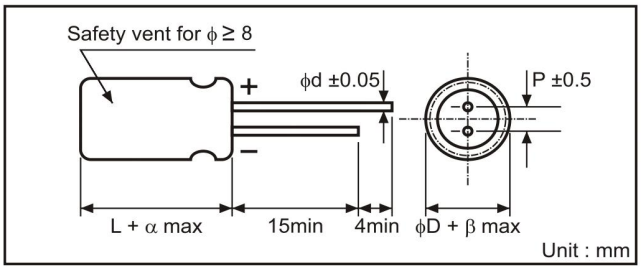


- Low impedance over wide temperature range of -40~105℃,with 5mm height.
- Suited for DC-DC converts where smaller case size and low impedance are required.

◆ SPECIFICATIONS

Item	Performance Characteristics
Operating temperature range	-40 to +105℃
Rated Working Voltage Range	6.3 to 35V
Nominal Capacitance Range	1 to 470μF
Capacitance Tolerance	±20(120Hz,+20℃)
Leakage Current	I≤ 0.01CV or 3(μA)after 2minutes whichever is greater measured with rated working voltage applied at +20 ℃
Dissipation Factor tan δ(120Hz,+20℃)	Working Voltage(V): 6.3, 10, 16, 25, 35 tan δ(max): 0.22, 0.2, 0.18, 0.14, 0.12
Low Temperature Characteristics	Impedance ratio max at 120Hz Working Voltage(V): 6.3, 10, 16, 25, 35 Z-25℃/Z+20℃: 2, 2, 2, 2, 2 Z-40℃/Z+20℃: 4, 4, 3, 3, 3
High Temperature Loading	Test conditions Duration : 1000 hours Ambient temp : +105℃ Applied vlotage:Rated DC Working voltage Post test requirements at +20℃ Leakage current :≤Initial specified value Cap . Change :≤ ±20%of Initial measured value tan δ :≤ 200% of Initial specified value
Shelf Life	Test conditions Duration : 500 hours Ambient temp : +105℃ Applied vlotage:(None) Post test requirements at +20℃ Leakage current :≤Initial specified value Cap . Change :≤ ±20%of Initial measured value tan δ :≤ 200% of Initial specified value

◆ CASE SIZE TABLE



ΦD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
Φd	0.45	0.45	0.45	0.45
α	1.5			
β	0.5			

◆ RIPPLE CURRENT MULTIPLIER

(1) Frequency Coefficient

freq.（Hz) / cap(μf)	120	1k	10k	100k	
~470	0.40	0.75	0.90	1.00	

(2) Tmperature Coefficient

Tmperatu	-55	60	70	85	105
FACTOR	2.33	2.17	2.00	1.75	1.00

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◆ DIMENSIONS

Voltage	6.3V			10V			16V		
Cap(μF)	Size	Imp	Ripple	Size	Imp	Ripple	Size	Imp	Ripple
10				4*5	5.00	50	4*5	5.00	50
22	4*5	5.00	50	4*5	4.00	65	4*5	4.00	68
33	4*5	4.00	58	4*5	3.10	75	5*5	2.80	100
47	4*5	3.30	69	4*5	2.60	85	5*5	2.30	110
				5*5	2.00	100	6.3*5	1.30	115
100	5*5	2.00	89	5*5	1.60	110	6.3*5	1.10	130
				6.3*5	1.30	130	8*5	0.82	150
220	6.3*5	1.30	115	8*5	0.87	150	8*5	0.70	165
470	8*5	0.88	135						

Maximum Allowable Ripple Current (mA rms) at 105℃ 100KHz Case Size ΦD X L (mm)

Maximum Impedance (Ω) at 20℃ 100KHz

Voltage	25V			35V					
Cap(μF)	Size	Imp	Ripple	Size	Imp	Ripple			
1				4*5	5.00	50			
2.2				4*5	5.00	50			
3.3				4*5	5.00	50			
4.7	4*5	5.00	50	4*5	5.00	50			
10	5*5	2.60	80	5*5	2.60	80			
22	5*5	2.10	100	6.3*5	1.30	115			
33	6.3*5	1.30	115	8*5	0.93	135			
47	6.3*5	1.00	135	8*5	0.78	150			
100	8*5	0.78	150						

Maximum Allowable Ripple Current (mA rms) at 105℃ 100KHz Case Size ΦD X L (mm)

Maximum Impedance (Ω) at 20℃ 100KHz