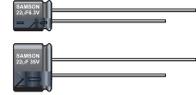


## SZM Series

5mmL(高), +105°C, Low Impedance(低阻抗品)

### FEATURES

1. Low Impedance over wide temperature range of -40°C~+105°C, with 5mm height.
2. Suited for DC-DC converters where smaller case size and lower impedance are required.



### SPECIFICATIONS

Item	Performance Characteristics							
Operating Temperature Range	-40 to +105°C							
Rated Working Voltage Range	6.3 to 35V							
Nominal Capacitance Range	1 to 100 $\mu$ F							
Capacitance Tolerance	$\pm$ 20% (120Hz, +20°C)							
Leakage Current	I $\leq$ 0.01CV or 3( $\mu$ A) whichever is greater measured after 1 minute application of rated working voltage at +20°C							
Dissipation Factor tan $\delta$ (120Hz, +20°C)	Working Voltage (V)	6.3	10	16	25	35		
	tan $\delta$ (max.)	0.22	0.20	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°C / Z+20°C	2	2	2	2	2		
	Z-40°C / Z+20°C	4	4	3	3	3		
High Temperature Loading	Test conditions				Post test requirements at +20°C			
	Duration	: 1000hours			Leakage current : $\leq$ Initial specified value			
	Ambient temp.	: +105°C			Cap. change : within $\pm$ 20% of initial measured value			
	Applied voltage	: Rated DC working voltage			tan $\delta$ : $\leq$ 200% of initial specified value			
Shelf Life	Test conditions				Post test requirements at +20°C			
	Duration	: 500 hours			Leakage current : $\leq$ Initial specified value			
	Ambient temp.	: +105°C			Cap. change : within $\pm$ 20% of initial measured value			
	Applied voltage	: (None)			tan $\delta$ : $\leq$ 200% of initial specified value			
Others	JIS C - 5141 JIS C - 5102							

### CASE SIZE TABLE

	$\phi$ D	4	5	6.3					
	P	1.5	2.0	2.5					
	$\phi$ d	0.45							

### RIPPLE CURRENT MULTIPLIER

Temperature Coefficient					Frequency Coefficient						
Temperature(°C)	~ 55	60	70	85	105	Cap( $\mu$ F)	Freq.(Hz)	120	1K	10K	100K
Factor	2.23	2.17	2.00	1.75	1.00	~ 100		0.40	0.75	0.90	1.00

# SAMSON

## SZM Series

5mmL(高), +105°C, Low Impedance(低阻抗品)

DIMENSIONS										
Voltage (Code)		6.3V			10V			16V		
Cap.( $\mu$ F)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
1	105									
1.5	155									
2.2	225									
3.3	335									
4.7	475									
6.8	685									
10	106							4 x 5	5.0	50
15	156							5 x 5	2.6	80
22	226	4 x 5	5.0	50	5 x 5	2.6	80	5 x 5	2.6	80
33	336	5 x 5	2.6	80	5 x 5	2.6	80	6.3 x 5	1.3	115
47	476	5 x 5	2.6	80	6.3 x 5	1.3	115	6.3 x 5	1.3	115
68	686	6.3 x 5	1.3	115						
100	107	6.3 x 5	1.3	115						

Maximum Allowable Ripple Current (mA rms) at 105°C 100KHz

Case Size  $\phi$ D x L(mm)

Maximum Impedance ( $\Omega$ ) at 20°C 100KHz

Voltage (Code)		25V			35V					
Cap.( $\mu$ F)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current			
1	105				4 x 5	5.0	50			
1.5	155				4 x 5	5.0	50			
2.2	225				4 x 5	5.0	50			
3.3	335				4 x 5	5.0	50			
4.7	475	4 x 5	5.0	50	4 x 5	5.0	50			
6.8	685	4 x 5	5.0	50	5 x 5	2.6	80			
10	106	5 x 5	2.6	80	5 x 5	2.6	80			
15	156	6.3 x 5	1.3	115	6.3 x 5	1.3	115			
22	226	6.3 x 5	1.3	115	6.3 x 5	1.3	115			
33	336	6.3 x 5	1.3	115						
47	476									
68	686									
100	107									

Maximum Allowable Ripple Current (mA rms) at 105°C 100KHz

Case Size  $\phi$ D x L(mm)

Maximum Impedance ( $\Omega$ ) at 20°C 100KHz