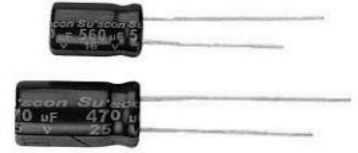


## SGN series

- Anhydrous product
- High ripple current, ultra low impedance at high frequency range
- Long life
- AEC-Q200 Compliant
- RoHS Compliant



### SPECIFICATIONS

Items	Characteristics							
Capacitance Tolerance	±20% (120Hz , 20°C)							
Operating Temperature Range	-55°C ~ +105°C							
Rated Voltage Range	6.3 ~ 50VDC							
Leakage Current	I ≤ 0.01CV or 3(μA), which is greater. (After 2 minutes application of DC rated voltage at 20°C)							
Dissipation Factor (tan δ)	Measurement Frequency:120Hz. Temperature: 20°C							
	Rated Voltage(V)	6.3	10	16	25	35	50	63~100
	tanδ ( Max)	0.24	0.20	0.16	0.15	0.12	0.10	0.09
When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.								
Low Temperature Stability	Measurement Frequency:120Hz							
Impedance Ratio(Max)	Rated Voltage(V)	6.3	10	16	25	35	50	63~100
	Z(-25°C) / Z(20°C)	2	2	2	2	2	2	2
	Z(-55°C) / Z(20°C)	3	3	3	3	3	3	3
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 5000 hours (ΦD≤6.3: 2000 hours; ΦD=8: 3000 hours; ΦD=10: 4000 hours) at 105°C.							
	Capacitance Change	within ±25% of Initial Value						
	tan δ	200% or less of Initial Specified Value						
	Leakage Current	Initial Specified Value or less						
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105°C without voltage applied. Before the measurement, the capacitance shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.							
	Capacitance Change	Within ±20% of Initial Value						
	tan δ	200% or less of Initial Specified Value						
	Leakage Current	Initial Specified Value or less						
Standards	JIS C 5101-4-1 (IEC 60384)							

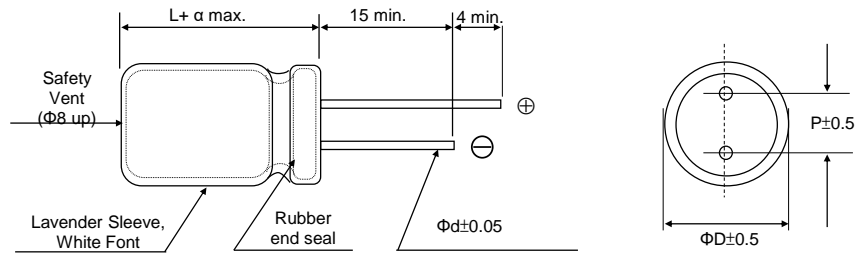
### Frequency Coefficient of Permissible Ripple Current

Capacitance(μF)	Frequency (Hz)				
	50	120	1K	10K	100K
≤ 33	0.45	0.55	0.75	0.90	1.00
47 ~ 330	0.60	0.70	0.85	0.95	1.00
470 ~ 1000	0.65	0.75	0.90	0.98	1.00
1200 ~ 6800	0.75	0.80	0.95	1.00	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

## DIMENSIONS(mm)

$\Phi D$	10
L	16
$\alpha$	2.0
P	5.0
$\Phi d$	0.6



## Electric Characteristics

Su'scon P/N	Cap. ( $\mu F$ )	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. ( $^{\circ}C$ )	Nominal Case Size D*L(mm)	Leakage Current Max ( $\mu A$ )	D.F. MAX (%)	R.C 100KHz (mA rms)	IMP 100KHZ at 25 $^{\circ}C$ ( $\Omega$ )Max	Load Life (hours)
SGN050M101G16PE50S00R	100	$\pm 20$	50	63	105	10*16	50	10	553	0.180	4000

### REMARKS:

1. Dissipation Factor Test: at 20 $^{\circ}C$ , 120 Hz
2. Capacitance Test: at 20 $^{\circ}C$ , 120 Hz
3. Ripple Current Test: at 105 $^{\circ}C$ , 100K Hz
4. Leakage Current: Initial specified value or less
5. When have characteristic requested: Load life & shelf life test and etc., judgment standard reference to our catalogue.

## **US Contact Information**

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**SGN-REV.1**