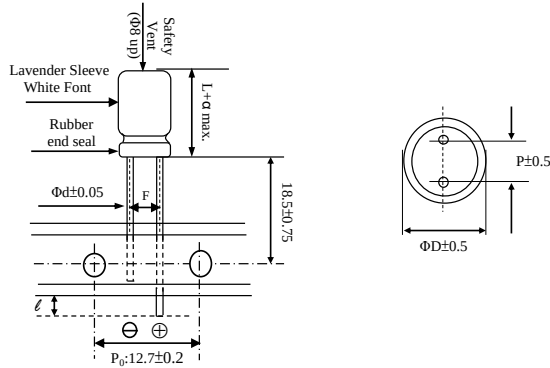


FOR APPROVAL

DIMENSIONS(mm)

ΦD	10
L	20
α	2.0
P	5.0
F	5.0
ℓ	1.0
Φd	0.6



Customer:		Electrolytic Capacitors								Su'scon		
Melchioni		SGN Series								Code		
Electric Characteristics:												
Melchioni	Su'scon	Cap. (uF)	Cap. Tol.	Rate Volt.	Surge Volt.	Oper. Temp.	Nominal Case Size	Leakage Current	D.F. MAX	R.C 100KHz	IMP 100KHZ	Load Life
P/N	P/N		(%)	(V-DC)	(V-DC)	(°C)	D*L(mm)	Max (uA)	(%)	(mA rms)	at 25°C (Ω)Max	(hours)
	SGN035M471G20PE89P50R	470	±20	35	44	105	10*20	164	12	1820	0.085	5000

REMARKS:	
1. Leakage Current Test:	6.3V ~100V at 20°C for 2 minutes ;
2. Operating temperature:	6.3V~100V -55°C~ +105°C ;
3. Dissipation Factor Test:	at 20°C, 120 Hz.
4. Capacitance Test:	at 20°C, 120 Hz.
5. Ripple Current Test :	at 105°C, 100K Hz ;
6. Load Life:	5000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.
Capacitance Change:	Within±25% of initial value;
tanδ:	200% or less of initial specified value; According to the specified value which stated in the catalogue to do the life testing;
Leakage Current:	Initial specified value or less;
7. 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 applide. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.
Capacitance Change :	Within±20% of initial value;
tanδ:	200% or less of initial specified value;
Leakage Current :	Initial specified value or less.
8. when have characteristic requested:	Load life & shelf life test and etc. , judgment standard reference to our catalogue.

●SPECIFICATION

Leakage Current 洩漏電流	I≤0.01CV or 3(uA) which is greater.(After 2 minutes application of DC working voltage,at 20°C)							
Dissipation Factor 散逸因素（損失角正切） (tan δ)	Measurement Frequency:120Hz. Temperature:20°C							
	Rate Voltage(V)	6.3	10	16	25	35	50	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 .							
Standards 參照標準	JIS C-5101-4(IEC 60384)							

●RIPPLE CURRENT COEFFICIENTS

Frequency coefficient of allowable ripple current					
Capacitance(uF)	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.

Production date:2023.03.21