

APC/APD Series Aluminum Anode Products

Feature

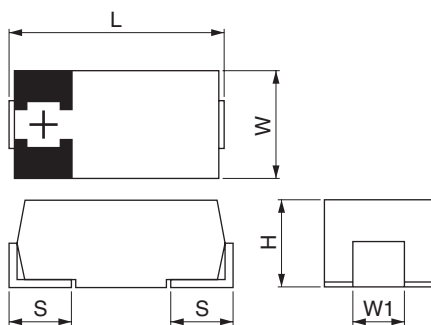
AP series is and has a cost performance advantage and low profile by using aluminum foil for the anode.



Specifications

Items	Condition	Characteristics		
Operating Temperature range	—	-55 to +105 (°C)		
Rated capacitance range	120Hz/20°C	10 to 33 (μF)		
Capacitance tolerance	120Hz/20°C	M:±20%		
Rated voltage	—	4.0 to 6.3 (V.DC)		
Dissipation Factor (D.F.)	120Hz/20°C	≤ 5.0 or 8.0 (%)		
Leakage current	Rated voltage applied, after 5 minutes	Please see the attached characteristics list		
Equivalent series resistance (E.S.R. mΩmax.)	100kHz/20°C	Please see the attached characteristics list		
Temperature characteristics of Impedance ratio	100kHz/+20°C	-55°C	Z/Z _{20°C}	0.9 to 2.0
		+105°C	Z/Z _{20°C}	0.6 to 1.1
Endurance	105°C, 2000h, rated voltage applied	ΔC/C	Within±20% of the initial value	
		D.F.	≤ 1.5 times the initial limit	
		L.C.	≤ The initial limit	
Damp heat (Steady state)	60°C, 90to95%RH, 500h, No voltage applied	ΔC/C	Within+40%, -20% of the initial value	
		D.F.	≤ 1.5 times the initial limit	
		L.C.	≤ 5 times the initial limit	
Surge	105°C, 1000 cycles, 1kΩdischarge resistance, surge voltage applied	ΔC/C	Within±5% of the initial value	
		D.F.	≤ twice the initial limit	
		L.C.	≤ 3 times the initial limit	

Dimensions



(unit: mm)

Size code	L (±0.2)	W (±0.2)	H (±0.1)	S (±0.2)	W1 (±0.1)
D1	7.3	4.3	1.4	1.3	2.4
D2	7.3	4.3	1.9	1.3	2.4

Size List

μF	RV (sV)	4.0 (5.0)	6.3 (8.0)
	10		D1, D2
15		D1	
22		D2	
33		D2	

Characteristics List

Series	Size code	SANYO Part number	Rated Voltage (V)	Rated Temperature (°C)	Rated Capacitance (μF)	Category Voltage (V)	Category Temperature (°C)	D.F. (%max.)	L.C. (μA) max./5min.	E.S.R. (mΩmax.) 100kHz/20°C	Maximum allowable ripple current (mA _{rms}) 100kHz*1	MSL	
												Reflow Temp. ≤ 260°C	Reflow Temp. ≤ 250°C
APD	D1	6APD10M	6.3	105	10	6.3	105	8.0	2.5	70	1900	Under evaluation	5
		4APD15M	4.0	105	15	4.0	105	8.0	2.4	70	1900		
APC	D2	6APC22M	6.3	105	22	6.3	105	5.0	13.9	40	1900		4
		6APC10M	6.3	105	10	6.3	105	8.0	6.3	70	1900		
		4APC33M	4.0	105	33	4.0	105	5.0	13.2	40	1900		

*1 100k to 500kHz, 45°C