SOLID ELECTROLYTIC CHIP TANTALUM SMD CAPACITOR, POSCAP SERIES

POSCAP is a solid electrolytic Tantalum type chip capacitor.

POSCAP, A NEW, BETTER TECHNOLOGY FOR A TANTALUM CAPACITOR.

POSCAP, A BETTER SURFACE MOUNT ALTERNATIVE TO STANDARD TANTALUM TECHNOLOGY.

The Anode is sintered Tantalum and the Cathode is a highly conductive Polymerized Organic Semiconductor formed using a new technology developed by Sanyo. **POSCAP** is a solid electrolytic chip capacitor. A new generation of Tantalum technology.

A proven technology now in production. Production capacity is available.

Features:

Safer than a standard Tantalum capacitor, especially in the short circuit mode.

Low impedance and low ESR at high frequency.

Lower ESR than most Tantalums. (40 milliohm in the D4 case size)

High ripple current capacity. (up to 3000 milliamps)

Temperature rating: -55C to + 105C

Voltage rating up to 16 volts. **(OK to operate at 90% of rated voltage if rated voltage is 10 volts or less, 80% if rated voltage is above 10 volts.)**

Low profile chip capacitor. (1.9 MM in the TPC series)

Reflow soldering method available.

APA/APB series, the anode is aluminum foil

TPA series, the anode is sintered tantalum.

TPB series, the anode is sintered tantalum.

TPC series, the anode is sintered tantalum, 1.9 mm height.

The cathode in all series is a highly conductive **Polymerized Organic Semiconductor** formed using a new technology developed by Sanyo.

SOLID ELECTROLYTIC CHIP TANTALUM SMD CAPACITOR, POSCAP SERIES

The **POSCAP** is an ideal chip capacitor especially for digital, high frequency devices.

CHARACTERISTICS List

APA/APB Series

*1 Capacitance tolerance: M= +/-20% *2 100~500 KHz, +45 degrees C *3 After 5 minutes

Size Code	Part Number *1	Rated Voltage (V)	Nominal Capacitance (uF)	Tangent of loss angle (DF)(% max.)	Leakage current (uA) *3	E.S.R 100 KHZ (mohm) (max.)	MAXIMUM allowable ripple current (mArms) *2
D1	6APB10M	6.3	10	8.0	6.3	70	1900
D1	10APB4R7M	10	4.7	8.0	4.7	70	1900
D1	16APB2R2M	16	2.2	8.0	3.5	70	1900
D2A	4APA33M	4.0	33	8.0	13.2	40	1900
D2A	6APA10M	6.3	10	8.0	6.3	70	1900
D2A	6APA22M	6.3	22	8.0	13.9	40	1900
D2A	10APA4R7M	10	4.7	8.0	4.7	70	1900
D2A	16APA2R2M	16	2.2	8.0	3.5	70	1900

The APA/APB Series are under development.

TPA Series

*1 Capacitance tolerance: M= +/-20% *2 100~500 KHz, +45 degrees C *3 After 5 minutes

Size Code	Part Number *1	Rated Voltage (V)	Nominal Capacitance (uF)	Tangent of loss angle (DF)(% max.)	Leakage current (uA) *3	E.S.R 100 KHZ (mohm) (max.)	MAXIMUM allowable ripple current (mArms) *2
D3	4TPA220M	4.0	220	8.0	88.0	80	1200
C	6TPA47M	6.3	47	8.0	29.6	100	1000
D3	6TPA150M	6.3	150	8.0	94.5	80	1200
C	10TPA33M	10	33	8.0	33.0	100	1000
D3	10TPA100M	10	100	8.0	100.0	80	1200

TPB Series

*1 Capacitance tolerance: M= +/-20% *2 100~500 KHz, +45 degrees C *3 After 5 minutes

Size	Part Number	Rated	Nominal	Tangent of	Leakage	E.S.R	MAXIMUM

SOLID ELECTROLYTIC CHIP TANTALUM SMD CAPACITOR, POSCAP SERIES

		(V)	(uF)	(DF)(% max.)	*3	(mohm) (max.)	ripple current
							(mArms) *2
D3	**2R5TPB330M**	2.5	330	8.0	82.5	65	1500
D3L	**2R5TPB330ML**	2.5	330	10.0	82.5	55	1900
D3L	**2R5TPB470ML**	2.5	470	10.0	117.5	40	2000
D4	**2R5TPB680M**	2.5	680	10.0	170.0	40	3000
D4	**2R5TPB1000M**	2.5	1000	15.0	250.0	30	3000
D3	**4TPB220M**	4.0	220	8.0	88.0	65	1500
D3L	**4TPB220ML**	4.0	220	10.0	88.0	55	1900
D3L	**4TPB330ML**	4.0	330	10.0	132.0	40	2000
D4	**4TPB470M**	4.0	470	10.0	188.0	40	3000
D4	**4TPB680M**	4.0	680	15.0	272.0	35	3000
D3	**6TPB150M**	6.3	150	8.0	94.5	55	1900
D3L	**6TPB150ML**	6.3	150	10.0	94.5	55	1900
D3L	**6TPB220ML**	6.3	220	10.0	138.6	40	2000
D4	**6TPB330M**	6,3	330	10.0	207.9	40	3000
D4	**6TPB470M**	6.3	470	15.0	296.1	35	3000
D3	**10TPB100M**	10	100	8.0	100.0	55	1900
D3L	**10TPB100Ml**	10	100	10.0	100.0	55	1900
D4	**10TPB220M**	10	220	10.0	220.0	40	3000
D3	**16TPB47M**	16	47	10.0	75.2	70	1400

The 16TPB47M is under development.

TPC Series

*1 Capacitance tolerance: M= +/-20% *2 100~500 KHz, +45 degrees C *3 After 5 minutes

Size	Part Number	Rated	Nominal	Tangent of	Leakage	E.S.R	MAXIMUM
Code	*1	Voltage	Capacitance	loss angle	current (uA)	100 KHZ	allowable
		(V)	(uF)	(DF)(% max.)	*3	(mohm) (max.)	ripple current
							(mArms) *2
D2	**2R5TPC220M**	2.5	220	10.0	55.0	45	1700
D2	**2R5TPC330M**	2.5	330	10.0	82.5	40	1900
D2	**4TPC150M**	4.0	150	10.0	60.0	45	1700
D2	**4TPC220M**	4.0	220	10.0	88.0	40	1900
D2	**6TPC100M**	6.3	100	10.0	63.0	45	1700
D2	**6TPC150M**	6.3	150	10.0	94.5	40	1900
D2	**10TPC68M**	10	68	10.0	68.0	45	1700
D2	**16TPC33M**	16	33	10.0	52.8	70	1400

The 16TPC33M is under development.

Last Updated on 2/19/2001