

Polymer Aluminum Electrolytic Capacitors



This product is RoHS compliant.

ULTRA LOW ESR 105°C SMD SOLID POLYMER ALUMINUM CAPACITORS

Solid polymer aluminum capacitors combine the high capacitance capability of an electrolytic component with the high frequency performance of film capacitors. When the need for low impedance at high frequency is critical for your design, one SPA chip is capable of replacing several liquid electrolyte aluminum or tantalum capacitors connected in parallel.

-Ideal for bypassing high frequency noise, and for switching frequency filtering in DC/DC conversion.
-The solid electrolyte delivers a typical expected operating life of more than 50 years.

Specifications:

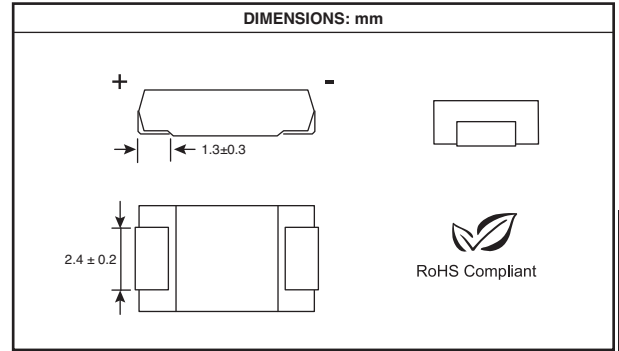
- Operating temperature range: -55°C to +105°C
- Surge voltage: 125% of rated voltage
- Capacitance tolerance: ±20% @ 120Hz and +20°C
- DC leakage current: ≤4V; to I ≤ .06CV (μA)
>4V; to I ≤ .04CV (μA) or 3μA

Applications:

- Motherboard By-Pass
- Switching supply input/output filters
- Power supply decoupling
- High frequency noise reduction
- Laptop LCD displays
- Automotive digital equipment
- Portable electronic equipment

Features:

- Ultra low E.S.R.
- High ripple current rating - up to 3.0 Amps
- Ultra stable - no change in imp. & e.s.r. from -55°C to +105°C
- Reduced parts count - replaces three or more tantalum caps
- Inherently more reliable, and ignition free



ESRD - High Voltage

MOUSER STOCK NO.	CDE Part Number	Volt (DC)	Value (μF)	Max. ESR 100KHz/20°C (Ohm)	Max. Ripple Current 100KHz/105°C (Amps)	Case Size: mm (L x W x H)	Price Each					Reel Qty.	Price Per Piece
							1	50	100	500	1000		
5987-2V180D/R	ESRD181M02R	2.0	180	0.015	3.0	7.3 x 4.3 x 1.8	2.10	1.94	1.65	1.35	1.20	2000	1.08
5987-ESRD560M04R	ESRD560M04R	4.0	56	0.018	2.5	7.3 x 4.3 x 2.8	1.19	1.10	.93	.76	.672	3500	.609
5987-ESRD121M04R	ESRD121M04R	4.0	120	0.015	3.0	7.3 x 4.3 x 1.8	2.10	1.94	1.65	1.35	1.20	2000	1.08
5987-ESRD100M06R	ESRD100M06R	6.3	10	0.055	1.4	7.3 x 4.3 x 2.8	1.12	1.04	.88	.72	.64	3500	.577
5987-ESRD330M06R	ESRD330M06R	6.3	33	0.028	2.0	7.3 x 4.3 x 2.8	1.17	1.08	.91	.76	.672	3500	.599
5987-ESRD470M06R	ESRD470M06R	6.3	47	0.018	2.5	7.3 x 4.3 x 2.8	1.19	1.10	.93	.76	.672	3500	.609
5987-ESRD101M06R	ESRD101M06R	6.3	100	0.015	3.0	7.3 x 4.3 x 1.8	2.10	1.94	1.65	1.35	1.20	2000	1.08
5987-ESRD121M06XR	ESRD121M06XR	6.3	120	0.012	3.3	7.3 x 4.3 x 1.8	3.55	3.30	2.79	2.28	2.03	2000	1.83
5987-ESRD8R2M08R	ESRD8R2M08R	8.0	8.2	0.055	1.4	7.3 x 4.3 x 2.8	1.12	1.04	.88	.72	.64	3500	.577
5987-ESRD220M08R	ESRD220M08R	8.0	22	0.028	2.0	7.3 x 4.3 x 2.8	1.17	1.08	.91	.76	.672	3500	.599
5987-ESRD330M08R	ESRD330M08R	8.0	33	0.018	2.5	7.3 x 4.3 x 2.8	1.19	1.10	.93	.76	.672	3500	.609
5987-8V68/R	ESRD680M08R	8.0	68	0.015	3.0	7.3 x 4.3 x 1.8	2.10	1.94	1.65	1.35	1.20	2000	1.08
5987-ESRD100M12R	ESRD100M12R	12.5	10	0.06	1.0	7.3 x 4.3 x 2.8	1.15	1.06	.90	.74	.652	3500	.589
5987-12.5V22DB	ESRD220M12R	12.5	22	0.03	1.6	7.3 x 4.3 x 2.8	1.19	1.10	.93	.76	.672	3500	.609
5987-ESRD2R2M16R	ESRD2R2M16R	16.0	2.2	0.11	1.0	7.3 x 4.3 x 2.8	1.12	1.04	.88	.72	.64	3500	.577
5987-ESRD4R7M16R	ESRD4R7M16R	16.0	4.7	0.08	1.0	7.3 x 4.3 x 2.8	1.15	1.06	.90	.74	.652	3500	.589
5987-16V6.8D-TR	ESRD6R8M16R	16.0	6.8	0.07	1.0	7.3 x 4.3 x 2.8	1.11	1.03	.87	.72	.64	3500	.57
5987-ESRD8R2M16R	ESRD8R2M16R	16.0	8.2	0.045	1.3	7.3 x 4.3 x 2.8	1.19	1.10	.93	.76	.672	3500	.609

ESRE - High Capacitance

MOUSER STOCK NO.	CDE Part Number	Volt (DC)	Value (μF)	Max. ESR 100KHz/20°C (Ohm)	Max. Ripple Current 100KHz/105°C (Amps)	Case Size: mm (L x W x H)	Price Each					Reel Qty.	Price Per Piece
							1	50	100	500	1000		
5987-ESRE271M02R	ESRE271M02R	2.0	270	0.012	3.3	7.3 x 4.3 x 4.1	3.15	2.93	2.48	2.03	1.80	2000	1.61
5987-ESRE331M02R	ESRE331M02R	2.0	330	0.012	3.3	7.3 x 4.3 x 4.1	3.15	2.93	2.48	2.03	1.80	2000	1.61
5987-ESRE221M0ER	ESRE221M0ER	2.5	220	0.012	3.3	7.3 x 4.3 x 4.1	3.15	2.93	2.48	2.03	1.80	2000	1.61
5987-ESRE181M04R	ESRE181M04R	4.0	180	0.012	3.3	7.3 x 4.3 x 4.1	3.15	2.93	2.48	2.03	1.80	2000	1.61
5987-ESRE151M06R	ESRE151M06R	6.3	150	0.012	3.3	7.3 x 4.3 x 4.1	3.15	2.93	2.48	2.03	1.80	2000	1.61
5985-6.3V100	ESRE101M08R	8.0	100	0.012	3.3	7.3 x 4.3 x 4.1	3.00	2.79	2.36	1.93	1.72	2000	1.54

ESRH - High Temperature

MOUSER STOCK NO.	CDE Part Number	Volt (DC)	Value (μF)	Max. ESR 100KHz/20°C (Ohm)	Max. Ripple Current 100KHz/105°C (Amps)	Case Size: mm (L x W x H)	Price Each					Reel Qty.	Price Per Piece
							1	50	100	500	1000		
5987-ESRH181M04R	ESRH181M04R	4.0	180	0.012	3.0	7.3 x 4.3 x 4.1	3.47	3.21	2.72	2.23	1.98	2000	1.78
5987-ESRH101M06R	ESRH101M06R	6.3	100	0.015	2.5	7.3 x 4.3 x 4.1	2.31	2.14	1.81	1.48	1.32	2000	1.19
5987-ESRH151M06R	ESRH151M06R	6.3	150	0.012	3.0	7.3 x 4.3 x 4.1	3.47	3.21	2.72	2.23	1.98	2000	1.78
5987-ESRH101M08R	ESRH101M08R	8.0	100	0.012	3.0	7.3 x 4.3 x 4.1	3.47	3.21	2.72	2.23	1.98	2000	1.78

ENGINEERING DESIGN KITS



RoHS Compliant

ESRE - High Capacitance

MOUSER STOCK NO.	CDE Part No.	Description	Cap. Range (μF)	Vdc	Price Each	
					1	5
5987-ESRE-KIT1	ESRE-KIT1	Polymer/Aluminum Electrolytics, Kit includes 6 pcs. each of 4 ratings (24 capacitors)	100-270	2-8	60.96	55.42
5987-ESRE-KIT2	ESRE-KIT2	Polymer/Aluminum Electrolytics, All Cap Values (7.3 x 4.3 x 4.2 mm high case); Kit includes 6 pcs. each of 7 ratings (42 capacitors)	100-330	2-8	113.40	103.76

ESRD - High Voltage

MOUSER STOCK NO.	CDE Part No.	Description	Cap. Range (μF)	Vdc	Price Each	
					1	5
5987-ESRD-KIT4	ESRD-KIT4	Polymer/Aluminum Electrolytics, Kit includes 12 pcs. each of 6 ratings (72 capacitors)	4.7-47	6.3-16	67.36	61.23
5987-ESRD-KIT6	ESRD-KIT6	Polymer/Aluminum Electrolytics, Highest ESRD Cap Values, With A Low Profile Case, (7.3 x 4.3 x 1.8 mm high case); Kit includes 6 pcs. each of 5 ratings (30 capacitors)	8.2-56	4-16	29.30	26.66
5987-ESRD-KIT7	ESRD-KIT7	Polymer/Aluminum Electrolytics, Kit includes 10 pcs. each of 17 ratings (170 capacitors)	2.2-56	-	158.44	144.58
5987-ESRD-KIT8	ESRD-KIT8	Polymer/Aluminum Electrolytics, Kit includes 6 pcs. each of 5 ratings (30 capacitors)	68-180	2-8	49.70	45.35
5987-ESRD-KIT9	ESRD-KIT9	Polymer/Aluminum Electrolytics, Highest ESRD Cap Values (7.3 x 4.3 x 3.1 mm high case); Kit includes 6 pcs. each of 5 ratings (30 capacitors)	100-220	2-6.3	61.95	56.68