

PANASONIC SMD Aluminum Electrolytics



RoHS Compliant This product is RoHS compliant.

SMD MEDIUM SIZE TP SERIES, TYPE V

Specifications:

- Category Temp. Range: -40°C to +125°C
- Rated W.V. Range: 10V.DC to 35V.DC
- Nominal Cap Range: 47µF to 470µF
- Capacitance Tolerance: ±20% (120Hz/+20°C)
- DC Leakage Current: 1 ≤ 0.01 CV (µA) After 2 minutes

Features:

- Lower ESR at Low temperature after endurance
- Endurance: 3000h at 125°C (D8 size: 2000h)
- Automotive
- Vibration-proof product is available upon request (ø8 ≤)
- RoHS directive compliant



RoHS Compliant

Marking

Capacitance (µF)
Series identification
Mark for Lead-Free Products
Black Dot (Square)
Rated Voltage Mark

Rated Voltage Mark	
A	10V
C	16V
E	25V
V	35V

DIMENSIONS: mm (in.)

Size Code	D	L	A, B	H Max.	I	W	P	K
D8	6.3	7.7	6.6	7.8	2.6	0.65±0.1	1.8	0.35-0.20+0.15
F	8.0	10.2	8.3	10.0	3.4	0.90±0.2	3.1	0.70±0.20
G	10.0	10.2	10.3	12.0	3.5	0.90±0.2	4.6	0.70±0.20

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Value (µF)	Voltage (VDC)	Case Size		Ripple Current 100KHz mA r.m.s.	E.S.R. 100 KHz Ω	D.F. % @ 120Hz	Price Each			
				Dia. (mm)	Length (mm)				1	25	100	500
667-EEE-TP1A221AP	EEE-TP1A221AP	220	10	8.0	10.2	270	0.20	3.0	1.34	.906	.822	.421
667-EEE-TP1A331AP	EEE-TP1A331AP	330	10	10.0	10.2	500	0.15	2.0	1.43	1.03	.94	.476
667-EEE-TPA331UAP	EEE-TPA331UAP	330	10	8.0	10.2	270	0.20	3.0	1.37	.928	.843	.432
667-EEE-TP1A471AP	EEE-TP1A471AP	470	10	10.0	10.2	500	0.15	2.0	1.43	1.03	.94	.476
667-EEE-TP1C101AP	EEE-TP1C101AP	100	16	8.0	10.2	270	0.20	3.0	1.34	.906	.822	.421
667-EEE-TPC101XAP	EEE-TPC101XAP	100	16	6.3	7.70	197	0.45	5.0	.87	.555	.499	.232
667-EEE-TP1C221AP	EEE-TP1C221AP	220	16	8.0	10.2	270	0.20	3.0	1.34	.906	.822	.421
667-EEE-TP1C331AP	EEE-TP1C331AP	330	16	10.0	10.2	500	0.15	2.0	1.43	1.03	.94	.476
667-EEE-TP1C471AP	EEE-TP1C471AP	470	16	10.0	10.2	500	0.15	2.0	1.43	1.03	.94	.476
667-EEE-TP1E101AP	EEE-TP1E101AP	100	25	8.0	10.2	270	0.20	3.0	1.34	.906	.822	.421
667-EEE-TP1E221AP	EEE-TP1E221AP	220	25	10.0	10.2	500	0.15	2.0	1.43	1.03	.94	.476
667-EEE-TP1E331AP	EEE-TP1E331AP	330	25	10.0	10.2	500	0.15	2.0	1.43	1.03	.94	.476
667-EEE-TP1V470AP	EEE-TP1V470AP	47	35	8.0	10.2	270	0.20	3.0	1.34	.906	.822	.421
667-EEE-TPV470XAP	EEE-TPV470XAP	47	35	6.3	7.70	197	0.45	5.0	.87	.555	.499	.232
667-EEE-TP1V101AP	EEE-TP1V101AP	100	35	8.0	10.2	270	0.20	3.0	1.34	.906	.822	.421
667-EEE-TP1V221AP	EEE-TP1V221AP	220	35	10.0	10.2	500	0.15	2.0	1.43	1.03	.94	.476

SMD HD SERIES, TYPE V

Specifications:

- Category Temp. Range: -40°C to +105°C
- Rated W.V. Range: 6.3V.DC to 100V.DC
- Nominal Cap Range: 0.47µF to 1000µF
- Capacitance Tolerance: ±20% (120Hz/+20°C)
- DC Leakage Current: 1 ≤ 0.01 CV or 3 (µA) After 2 minutes (Whichever is greater)

Features:

- Endurance: 105°C 5000h
- Vibration-proof product is available upon request (ø8 ≤)
- RoHS directive compliant



RoHS Compliant

Marking

Capacitance (µF)
Series identification
Mark for Lead-Free Products
Black Dot (Square)
Rated Voltage Mark

Rated Voltage Mark			
I	6.3V	V	35V
A	10V	H	50V
C	16V	J	63V
E	25V	2A	100V

DIMENSIONS: mm (in.) not to scale

Size Code	D	L	A, B	H Max.	I	W	P	K
B	4.0	5.8	4.3	5.5	1.8	0.65±0.1	1.0	0.35-0.20 to +0.15
C	5.0	5.8	5.3	6.5	2.2	0.65±0.1	1.5	0.35±0.20 to +0.15
D	6.3	5.8	6.6	7.8	2.6	0.65±0.1	1.8	0.35±0.20 to +0.15
D8	6.3	7.7	6.6	7.8	2.6	0.65±0.1	1.8	0.35±0.20 to +0.15
E	8.0	6.2	8.3	9.5	3.4	0.65±0.1	2.2	0.35±0.20 to +0.15
F	8.0	10.2	8.3	10.0	3.4	0.90±0.2	3.1	0.70±0.20
G	10.0	10.2	10.3	12.0	3.5	0.90±0.2	4.6	0.70±0.20

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Panasonic Part No.	Value (µF)	Voltage (VDC)	Case Size		Ripple Current 100KHz mA r.m.s.	E.S.R. 100 KHz Ω	D.F. % @ 120Hz	Price Each			
				Dia. (mm)	Length (mm)				1	25	100	500
667-EEE-HD0J331AP	EEE-HD0J331AP	330	6.3	8	10.2	230	1.5	0.3	1.08	.689	.62	.327
667-EEE-HD0J102AP	EEE-HD0J102AP	1,000	6.3	10	10.2	313	0.8	0.5	1.14	.766	.696	.363
667-EEE-HD1A101AP	EEE-HD1A101AP	100	10	8	6.2	62	2	0.3	.83	.531	.478	.385
667-EEE-HD1A221AP	EEE-HD1A221AP	220	10	8	10.2	160	1.5	0.3	1.08	.689	.62	.327
667-EEE-HD1A331AP	EEE-HD1A331AP	330	10	10	10.2	238	0.8	0.3	1.14	.766	.696	.363
667-EEE-HD1C100AR	EEE-HD1C100AR	10	16	4	5.8	28	12	0.2	.53	.301	.251	.16
667-EEE-HD1C220AR	EEE-HD1C220AR	22	16	5	5.8	39	7.2	0.2	.63	.36	.30	.192
667-EEE-HD1C470AP	EEE-HD1C470AP	47	16	6.3	5.8	70	4	0.2	.56	.338	.295	.211
667-EEE-HD1C101AP	EEE-HD1C101AP	100	16	8	10.2	130	1.5	0.2	1.08	.689	.62	.327
667-EEE-HD1C221AP	EEE-HD1C221AP	220	16	10	10.2	220	0.8	0.2	1.14	.766	.696	.363
667-EEE-HD1C471AP	EEE-HD1C471AP	470	16	10	10.2	340	0.8	0.2	1.14	.766	.696	.363
667-EEE-HD1E4R7AR	EEE-HD1E4R7AR	4.7	25	4	5.8	17	12	0.16	.53	.301	.251	.16
667-EEE-HD1E100AR	EEE-HD1E100AR	10	25	5	5.8	28	7.2	0.16	.63	.36	.30	.192
667-EEE-HD1E220AP	EEE-HD1E220AP	22	25	6.3	5.8	55	4	0.16	.56	.338	.295	.211
667-EEE-HD1E330AP	EEE-HD1E330AP	33	25	6.3	5.8	55	4	0.16	.56	.338	.295	.211
667-EEE-HD1E470AP	EEE-HD1E470AP	47	25	8	6.2	56	2	0.18	.83	.531	.478	.385
667-EEE-HD1E101AP	EEE-HD1E101AP	100	25	8	10.2	130	1.5	0.16	1.08	.689	.62	.327
667-EEE-HD1E331AP	EEE-HD1E331AP	330	25	10	10.2	238	0.8	0.16	1.14	.766	.696	.363
667-EEE-HD1V4R7AR	EEE-HD1V4R7AR	4.7	35	4	5.8	17	12	0.13	.53	.301	.251	.16
667-EEE-HD1V100AR	EEE-HD1V100AR	10	35	5	5.8	28	7.2	0.13	.63	.36	.30	.192
667-EEE-HD1V220AP	EEE-HD1V220AP	22	35	6.3	5.8	55	4	0.13	.56	.338	.295	.211
667-EEE-HD1V330AP	EEE-HD1V330AP	33	35	8	6.2	53	2	0.16	.83	.531	.478	.385
667-EEE-HDV330XAP	EEE-HDV330XAP	33	35	6.3	7.7	57	2	0.13	.77	.462	.404	.174
667-EEE-HD1V470AP	EEE-HD1V470AP	47	35	8	10.2	79	1.5	0.14	1.08	.689	.62	.327
667-EEE-HDV470XAP	EEE-HDV470XAP	47	35	6.3	7.7	57	2	0.14	.77	.462	.404	.174
667-EEE-HD1V101AP	EEE-HD1V101AP	100	35	10	10.2	101	0.8	0.14	1.14	.766	.696	.363
667-EEE-HD1V221AP	EEE-HD1V221AP	220	35	10	10.2	220	0.8	0.14	1.14	.766	.696	.363
667-EEE-HD1HR47R	EEE-HD1HR47R	0.47	50	4	5.8	5	12	0.12	.48	.274	.228	.146
667-EEE-HD1H1R0R	EEE-HD1H1R0R	1.0	40	4	5.8	7	12	0.12	.48	.274	.228	.146
667-EEE-HD1H2R2R	EEE-HD1H2R2R	2.2	50	4	5.8	12	12	0.12	.48	.274	.228	.146
667-EEE-HD1H3R3R	EEE-HD1H3R3R	3.3	50	4	5.8	16	12	0.12	.48	.274	.228	.146
667-EEE-HD1H4R7R	EEE-HD1H4R7R	4.7	50	5	5.8	21	7.2	0.12	.57	.327	.272	.174
667-EEE-HD1H100P	EEE-HD1H100P	10	50	6.3	5.8	33	4	0.12	.67	.384	.32	.204
667-EEE-HD1H220P	EEE-HD1H220P	22	50	8	6.2	50	2	0.14	.98	.626	.563	.454
667-EEE-HD1H330P	EEE-HD1H330P	33	50	8	10.2	74	1.5	0.14	.98	.626	.563	.298
667-EEE-HD1H470P	EEE-HD1H470P	47	50	10	10.2	94	0.8	0.14	1.03	.697	.633	.33
667-EEE-HD1H101P	EEE-HD1H101P	100	50	10	10.2	94	0.8	0.14	1.03	.697	.633	.33
667-EEE-HD1J100P	EEE-HD1J100P	10	63	8	6.2	45	2	0.18	.97	.58	.507	.362
667-EEE-HD1J220P	EEE-HD1J220P	22	63	8	10.2	65	1.5	0.18	.98	.626	.563	.298
667-EEE-HD1J330P	EEE-HD1J330P	33	63	10	10.2	80	0.8	0.18	1.03	.697	.633	.33
667-EEE-HD2A3R3P	EEE-HD2A3R3P	3.3	100	8	6.2	30	2	0.18	.97	.58	.507	.362
667-EEE-HD2A4R7P	EEE-HD2A4R7P	4.7	100	8	10.2	50	1.5	0.18	.98	.626	.563	.298
667-EEE-HD2A100P	EEE-HD2A100P	10	100	8	10.2	55	1.5	0.18	.98	.626	.563	.298
667-EEE-HD2A220P	EEE-HD2A220P	22	100	10	10.2	70	0.8	0.18	1.03	.697	.633	.33

Panasonic Aluminum Caps, SMD