

Return Group Chart



MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

Long life, High ripple, 135°C

GPD Series

- Guaranteed short time at 150°C
- Downsized and high-ripple current version of GPA series
- For automobile modules and other high temperature applications
- Endurance with ripple current : 2,000 to 3,000 hours at 125°C to 135°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant
- AEC-Q200 compliant : Please contact Chemi-Con for more details, test data, information.

GPA → Downsized Higher ripple current → GPD

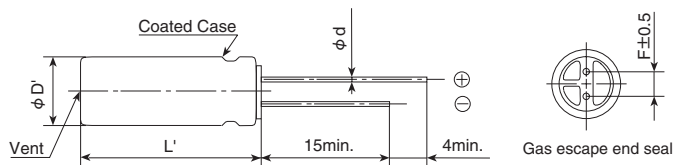


◆ SPECIFICATIONS

Items	Characteristics							
Category	-40 to +135°C							
Temperature Range	-40 to +135°C							
Rated Voltage Range	25 to 100V _{dc}							
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)							
Leakage Current	I=0.03CV or 4μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C, 1 minute)							
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	25V	35V	50V	63V	80V	100V	
	tan δ (Max.)	0.14	0.12	0.10	0.10	0.08	0.08	
	When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)							
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	25V	35V	50V	63V	80V	100V	
	Z(-25°C)/Z(+20°C)	2	2	2	2	2	2	
	Z(-40°C)/Z(+20°C)	4	4	4	4	4	4	
Endurance 1	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for the specified period of time at 125°C or 135°C.							
	Time	125°C	3,000hours					
		135°C	25 to 50V _{dc} :		3,000hours			
			63 to 100V _{dc} :		2,000hours			
	Capacitance change	≤ ±30% of the initial value						
D.F. (tan δ)	≤300% of the initial specified value							
Leakage current	≤The initial specified value							
Endurance 2	The following specifications shall be satisfied when the capacitors are restored to 20°C after the test condition that the rated voltage is applied for 100 hours at 150°C and DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for the specified period of time at 125°C or 135°C.							
	Time	125°C	2,500hours					
		135°C	25 to 50V _{dc} :		2,500hours			
			63 to 100V _{dc} :		1,500hours			
	Capacitance change	≤ ±30% of the initial value						
D.F. (tan δ)	≤300% of the initial specified value							
Leakage current	≤The initial specified value							
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.							
	Capacitance change	≤ ±30% of the initial value						
	D.F. (tan δ)	≤300% of the initial specified value						
	Leakage current	≤The initial specified value						

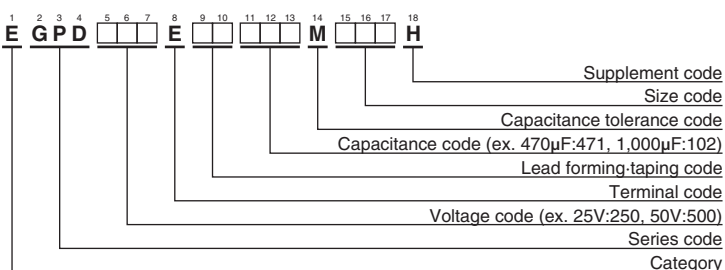
◆ DIMENSIONS [mm]

- Terminal Code : E



φD	12.5	16	18
φd	0.6	0.8	0.8
F	5.0	7.5	7.5
φD'	φD±0.5		
L'	L ⁺ 1.5 L ⁻ 1.0		

◆ PART NUMBERING SYSTEM



Please refer to "Product code guide (radial lead type)"

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GPDSeries

◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	ESR (Ω max./100kHz)		Rated ripple current (mArms/100kHz)		Part No.
				20°C	-40°C	125°C	135°C	
25	2,000	12.5 × 20	0.16	0.042	0.48	2,760	1,690	EGPD250E□□202MK20H
	3,000	12.5 × 25	0.18	0.033	0.30	3,480	2,010	EGPD250E□□302MK25H
	3,300	16 × 20	0.18	0.035	0.27	3,040	1,860	EGPD250E□□332ML20H
	3,600	12.5 × 30	0.18	0.028	0.24	4,490	2,900	EGPD250E□□362MK30H
	4,300	18 × 20	0.20	0.034	0.22	3,250	1,870	EGPD250E□□432MM20H
	4,700	12.5 × 35	0.20	0.025	0.21	5,140	3,190	EGPD250E□□472MK35H
	4,700	16 × 25	0.20	0.028	0.22	4,260	2,870	EGPD250E□□472ML25H
	5,100	12.5 × 40	0.22	0.024	0.19	5,810	3,470	EGPD250E□□512MK40H
	5,600	16 × 30	0.22	0.023	0.18	5,480	3,400	EGPD250E□□562ML30H
	6,200	18 × 25	0.24	0.027	0.19	4,500	2,900	EGPD250E□□622MM25H
	7,500	16 × 35	0.26	0.020	0.14	6,070	3,630	EGPD250E□□752ML35H
	7,500	18 × 30	0.26	0.022	0.16	5,600	3,470	EGPD250E□□752MM30H
9,100	16 × 40	0.30	0.019	0.12	6,810	3,930	EGPD250E□□912ML40H	
10,000	18 × 35	0.32	0.019	0.12	6,280	3,750	EGPD250E□□103MM35H	
12,000	18 × 40	0.36	0.018	0.10	7,070	4,080	EGPD250E□□123MM40H	
35	1,300	12.5 × 20	0.12	0.042	0.48	2,760	1,690	EGPD350E□□132MK20H
	1,800	12.5 × 25	0.12	0.033	0.30	3,480	2,010	EGPD350E□□182MK25H
	2,000	16 × 20	0.14	0.035	0.27	3,040	1,860	EGPD350E□□202ML20H
	2,200	12.5 × 30	0.14	0.028	0.24	4,490	2,900	EGPD350E□□222MK30H
	2,400	18 × 20	0.14	0.034	0.22	3,250	1,870	EGPD350E□□242MM20H
	2,700	12.5 × 35	0.14	0.025	0.21	5,140	3,190	EGPD350E□□272MK35H
	3,000	16 × 25	0.16	0.028	0.22	4,260	2,870	EGPD350E□□302ML25H
	3,300	12.5 × 40	0.16	0.024	0.19	5,810	3,470	EGPD350E□□332MK40H
	3,600	16 × 30	0.16	0.023	0.18	5,480	3,400	EGPD350E□□362ML30H
	3,900	18 × 25	0.16	0.027	0.19	4,500	2,900	EGPD350E□□392MM25H
	4,300	16 × 35	0.18	0.020	0.14	6,070	3,630	EGPD350E□□432ML35H
	4,700	18 × 30	0.18	0.022	0.16	5,600	3,470	EGPD350E□□472MM30H
5,600	16 × 40	0.20	0.019	0.12	6,810	3,930	EGPD350E□□562ML40H	
6,200	18 × 35	0.22	0.019	0.12	6,280	3,750	EGPD350E□□622MM35H	
7,500	18 × 40	0.24	0.018	0.10	7,070	4,080	EGPD350E□□752MM40H	
50	620	12.5 × 20	0.10	0.073	0.88	2,400	1,470	EGPD500E□□621MK20H
	820	12.5 × 25	0.10	0.058	0.67	3,350	2,260	EGPD500E□□821MK25H
	1,000	16 × 20	0.10	0.050	0.55	2,960	1,870	EGPD500E□□102ML20H
	1,100	12.5 × 30	0.10	0.048	0.52	4,220	2,520	EGPD500E□□112MK30H
	1,300	12.5 × 35	0.10	0.042	0.44	4,810	2,780	EGPD500E□□132MK35H
	1,300	16 × 25	0.10	0.042	0.44	4,040	2,500	EGPD500E□□132ML25H
	1,300	18 × 20	0.10	0.042	0.44	3,130	2,110	EGPD500E□□132MM20H
	1,600	12.5 × 40	0.10	0.037	0.36	5,240	3,020	EGPD500E□□162MK40H
	1,600	16 × 30	0.10	0.035	0.36	5,130	2,960	EGPD500E□□162ML30H
	1,800	18 × 25	0.10	0.033	0.32	4,230	2,530	EGPD500E□□182MM25H
	2,200	16 × 35	0.12	0.029	0.27	5,480	3,160	EGPD500E□□222ML35H
	2,400	18 × 30	0.12	0.028	0.25	5,240	3,020	EGPD500E□□242MM30H
2,700	16 × 40	0.12	0.025	0.22	5,930	3,420	EGPD500E□□272ML40H	
3,000	18 × 35	0.14	0.024	0.20	5,870	3,390	EGPD500E□□302MM35H	
3,600	18 × 40	0.14	0.023	0.16	6,420	3,700	EGPD500E□□362MM40H	
63	390	12.5 × 20	0.10	0.072	0.56	1,640	1,420	EGPD630E□□391MK20H
	560	12.5 × 25	0.10	0.052	0.39	2,520	2,050	EGPD630E□□561MK25H
	680	16 × 20	0.10	0.053	0.34	2,140	1,910	EGPD630E□□681ML20H
	750	12.5 × 30	0.10	0.042	0.30	3,110	2,630	EGPD630E□□751MK30H
	910	12.5 × 35	0.10	0.035	0.25	3,760	2,970	EGPD630E□□911MK35H
	910	18 × 20	0.10	0.044	0.26	2,350	2,100	EGPD630E□□911MM20H
	1,000	16 × 25	0.10	0.038	0.23	2,940	2,680	EGPD630E□□102ML25H
	1,100	12.5 × 40	0.10	0.031	0.22	4,610	3,260	EGPD630E□□112MK40H
	1,200	16 × 30	0.10	0.034	0.20	3,860	3,050	EGPD630E□□122ML30H
	1,300	18 × 25	0.10	0.033	0.19	3,080	2,810	EGPD630E□□132MM25H
	1,600	16 × 35	0.10	0.027	0.15	4,590	3,420	EGPD630E□□162ML35H
	1,600	18 × 30	0.10	0.028	0.15	4,080	3,220	EGPD630E□□162MM30H
1,800	16 × 40	0.10	0.025	0.14	5,190	3,670	EGPD630E□□182ML40H	
2,200	18 × 35	0.12	0.022	0.12	5,220	3,690	EGPD630E□□222MM35H	
2,400	18 × 40	0.12	0.021	0.11	5,660	3,820	EGPD630E□□242MM40H	

□□ : Enter the appropriate lead forming or taping code.