

CD11GAS series

- Miniaturized, long life
- Endurance: +105°C 8,000~10,000 hours
- RoHS Compliant

Upgrade

CD11GA



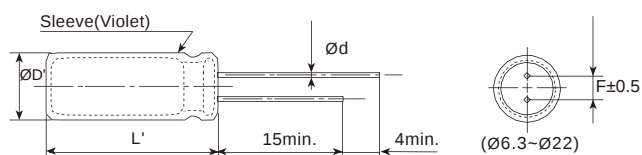
CD11GAS



SPECIFICATIONS

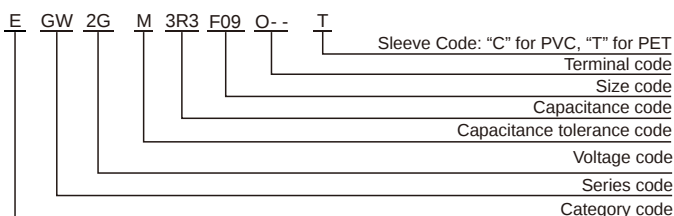
Items	Characteristics										
Category Temperature Range	-40~+105°C										
Rated Voltage Range	140~500 V _{dc}										
Capacitance Tolerance	±20%(M) (at 20°C,120Hz)										
Leakage Current	140~400 V _{dc}	450~500 V _{dc}		Where, I: Max.leakage current (μA),C:Nominal capacitance (μF), V: Rated voltage (V) (at 20°C after 2 minutes)							
	I≤0.02CV+10μA	I≤0.03CV+10μA									
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	140	160	200	250	315	350	400	450	500	(at 20°C,120Hz)
	tanδ (max.)	0.15	0.15	0.15	0.15	0.20	0.20	0.20	0.20	0.24	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V _{dc})	140	160	200	250	315	350	400	450	500	(at 120Hz)
	Z(-25°C)/Z(+20°C)	3	3	3	3	5	5	5	6	6	
	Z(-40°C)/Z(+20°C)	6	6	6	6	6	6	6	9	15	
Endurance	The specifications listed below shall be met when the capacitors are restored to 20°C after DC voltage plus the rated ripple current is applied for 10,000 hours at 105°C(WV:500V for 8,000 hours),the peak voltage shall not exceed the rated voltage.										
	Capacitance Change		≤±20% of the initial value								
	D.F. (tanδ)		≤200% 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 leaving them under no load at 105°C for 1,000 hours.										
	Capacitance Change		≤±20% of the initial value								
	D.F. (tanδ)		≤200% of the initial specified value								
	Leakage Current		≤200% of the initial specified value								

DIMENSIONS[mm]



ØD	6.3	8	10	12.5	16	18	22
Ød	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.5	3.5	5.0	5.0	7.5	7.5	10
ØD'	ØD+0.5max.						
L'	L+2max.						

PART NUMBERING SYSTEM



RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Freq.(Hz)	120	1k	10k	100k
Rated voltage(V _{dc})				
140~500	0.50	0.80	0.90	1.00

CD11GAS series

■ STANDARD RATINGS (Rated ripple current: mArms/105°C 100kHz)

WV (Vdc)	Cap (μF)	Size ΦD×L(mm)	Rated ripple current	Part Number
140(2A)	10	6.3×12	115	EGW2AM100E12OT
	15	6.3×12	145	EGW2AM150E12OT
	22	8×12	270	EGW2AM220F12OT
	33	10×12	380	EGW2AM330G12OT
	47	8×20	480	EGW2AM470F20OT
	68	10×20	570	EGW2AM680G20OT
	100	12.5×16	710	EGW2AM101W16OT
	150	12.5×25	980	EGW2AM151W25OT
	220	16×20	1320	EGW2AM221L20OT
160(2C)	1	6.3×7	36	EGW2CM010E07OT
		6.3×9	40	EGW2CM010E09OT
	1.5	6.3×7	40	EGW2CM1R5E07OT
		6.3×9	45	EGW2CM1R5E09OT
	1.8	6.3×7	45	EGW2CM1R8E07OT
		6.3×9	50	EGW2CM1R8E09OT
	2.2	6.3×7	50	EGW2CM2R2E07OT
		6.3×9	55	EGW2CM2R2E09OT
	2.8	6.3×9	70	EGW2CM2R8E09OT
		6.3×12	78	EGW2CM2R8E12OT
	3.3	6.3×9	85	EGW2CM3R3E09OT
		6.3×12	92	EGW2CM3R3E12OT
	4.7	6.3×9	92	EGW2CM4R7E09OT
		6.3×12	97	EGW2CM4R7E12OT
	5.6	6.3×9	96	EGW2CM5R6E09OT
		6.3×12	100	EGW2CM5R6E12OT
	6.8	6.3×9	100	EGW2CM6R8E09OT
		6.3×12	107	EGW2CM6R8E12OT
	8.2	8×9	107	EGW2CM6R8F09OT
		6.3×12	150	EGW2CM8R2E12OT
	10	8×9	150	EGW2CM8R2F09OT
		8×9	190	EGW2CM100F09OT
	15	8×12	240	EGW2CM100F12OT
		8×9	270	EGW2CM150F09OT
	22	8×12	290	EGW2CM150F12OT
		8×12	390	EGW2CM220F12OT
	33	10×12	430	EGW2CM220G12OT
		10×16	520	EGW2CM330G16OT
	47	10×16	680	EGW2CM470G16OT
		10×20	800	EGW2CM560G20OT
	68	10×20	950	EGW2CM680G20OT
		12.5×16	1060	EGW2CM680W16OT
	82	12.5×20	1260	EGW2CM820W20OT
		12.5×20	1350	EGW2CM101W20OT
	100	12.5×25	1750	EGW2CM151W25OT
		16×20	1790	EGW2CM151L20OT
	220	16×25	2130	EGW2CM221L25OT
		18×30	2520	EGW2CM331M30OT
	470	18×35	2880	EGW2CM471M35OT
200(2D)	1	6.3×7	45	EGW2DM010E07OT
		6.3×9	50	EGW2DM010E09OT
	1.2	6.3×7	50	EGW2DM1R2E07OT
		6.3×9	55	EGW2DM1R2E09OT
	1.5	6.3×7	55	EGW2DM1R5E07OT
		6.3×9	60	EGW2DM1R5E09OT
	1.8	6.3×7	60	EGW2DM1R8E07OT
		6.3×9	66	EGW2DM1R8E09OT
	2.2	6.3×9	72	EGW2DM2R2E09OT
		6.3×12	81	EGW2DM2R2E12OT
	2.8	6.3×9	81	EGW2DM2R8E09OT
		6.3×12	88	EGW2DM2R8E12OT
	3.3	6.3×9	105	EGW2DM3R3E09OT
		6.3×12	112	EGW2DM3R3E12OT
	4.7	6.3×12	115	EGW2DM4R7E12OT
		8×9	117	EGW2DM4R7F09OT
	8.2	8×12	120	EGW2DM4R7F12OT

WV (Vdc)	Cap (μF)	Size ΦD×L(mm)	Rated ripple current	Part Number
200(2D)	5.6	8×9	120	EGW2DM5R6F09OT
		8×12	126	EGW2DM5R6F12OT
	6.8	8×9	126	EGW2DM6R8F09OT
		8×12	132	EGW2DM6R8F12OT
	8.2	8×9	180	EGW2DM8R2F09OT
		8×12	200	EGW2DM8R2F12OT
	10	8×9	190	EGW2DM100F09OT
		8×12	230	EGW2DM100F12OT
	15	8×16	310	EGW2DM150F16OT
		10×12	310	EGW2DM150G12OT
	22	10×16	475	EGW2DM220G16OT
		10×20	650	EGW2DM330G20OT
	33	12.5×16	650	EGW2DM330W16OT
		12.5×16	880	EGW2DM470W16OT
	47	12.5×20	980	EGW2DM470W20OT
		12.5×25	1300	EGW2DM680W25OT
	82	16×20	1380	EGW2DM820L20OT
		16×20	1420	EGW2DM101L20OT
250(2E)	100	16×25	1494	EGW2DM101L25OT
		16×25	1680	EGW2DM151L25OT
	150	16×30	1989	EGW2DM151L30OT
		18×30	2150	EGW2DM221M30OT
	330	18×35	2250	EGW2DM331M35OT
250(2E)	1	6.3×7	45	EGW2EM010E07OT
		6.3×9	50	EGW2EM010E09OT
	1.2	6.3×7	50	EGW2EM1R2E07OT
		6.3×9	55	EGW2EM1R2E09OT
	1.5	6.3×7	55	EGW2EM1R5E07OT
		6.3×9	60	EGW2EM1R5E09OT
	1.8	6.3×7	61	EGW2EM1R8E07OT
		6.3×9	70	EGW2EM1R8E09OT
	2.2	6.3×9	72	EGW2EM2R2E09OT
		6.3×12	81	EGW2EM2R2E12OT
	2.8	6.3×9	81	EGW2EM2R8E09OT
		6.3×12	88	EGW2EM2R8E12OT
	3.3	6.3×9	102	EGW2EM3R3E09OT
		6.3×12	112	EGW2EM3R3E12OT
	4.7	6.3×9	112	EGW2EM4R7E09OT
		6.3×12	115	EGW2EM4R7E12OT
	5.6	8×9	115	EGW2EM4R7F09OT
		8×12	120	EGW2EM4R7F12OT
	6.8	8×9	120	EGW2EM5R6F09OT
		8×12	126	EGW2EM5R6F12OT
	8.2	8×9	145	EGW2EM6R8F09OT
		8×12	150	EGW2EM6R8F12OT
	10	8×12	200	EGW2EM8R2F12OT
		8×16	260	EGW2EM8R2F16OT
	15	8×12	220	EGW2EM100F12OT
		8×16	275	EGW2EM100F16OT
	22	8×16	350	EGW2EM150F16OT
		10×12	360	EGW2EM150G12OT
	33	10×16	480	EGW2EM220G16OT
		10×20	500	EGW2EM220G20OT
	47	10×20	600	EGW2EM330G20OT
		12.5×16	600	EGW2EM330W16OT
	68	12.5×20	660	EGW2EM330W20OT
		12.5×16	880	EGW2EM470W16OT
	82	12.5×20	980	EGW2EM470W20OT
		12.5×25	1180	EGW2EM680W25OT
	100	16×20	1250	EGW2EM680L20OT
		16×20	1320	EGW2EM820L20OT
	100	16×20	1360	EGW2EM101L20OT
		16×25	1420	EGW2EM101L25OT

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■ STANDARD RATINGS (Rated ripple current: mAmps/105°C 100kHz)

WV (Vdc)	Cap (μF)	Size ΦD×L(mm)	Rated ripple current	Part Number
250(2E)	150	16×30	1820	EGW2EM151L300T
		18×25	1820	EGW2EM151M250T
	220	18×30	2150	EGW2EM221M300T
	330	18×40	2310	EGW2EM331M400T
315(2F)	2.2	6.3×9	82	EGW2FM2R2E090T
	3.3	6.3×12	100	EGW2FM3R3E120T
	4.7	8×9	120	EGW2FM4R7F090T
	5.6	8×12	142	EGW2FM5R6F120T
	6.8	8×12	162	EGW2FM6R8F120T
	8.2	8×12	194	EGW2FM8R2F120T
	10	10×12	230	EGW2FM100G120T
	15	10×16	340	EGW2FM150G160T
	22	10×20	460	EGW2FM220G200T
	33	12.5×20	600	EGW2FM330W200T
350(2V)	47	12.5×25	680	EGW2FM470W250T
	1	6.3×9	55	EGW2VM010E090T
		6.3×12	60	EGW2VM010E120T
	1.2	6.3×9	60	EGW2VM1R2E090T
		6.3×9	65	EGW2VM1R5E090T
	1.5	6.3×12	70	EGW2VM1R5E120T
		6.3×9	72	EGW2VM1R8E090T
	1.8	6.3×12	80	EGW2VM1R8E120T
		6.3×9	82	EGW2VM2R2E090T
	2.2	6.3×12	86	EGW2VM2R2E120T
		8×9	88	EGW2VM2R8F090T
	2.8	8×12	95	EGW2VM2R8F120T
		8×9	100	EGW2VM3R3F090T
	3.3	8×12	108	EGW2VM3R3F120T
		8×9	114	EGW2VM4R7F090T
	4.7	8×12	120	EGW2VM4R7F120T
		8×12	150	EGW2VM5R6F120T
	5.6	8×16	162	EGW2VM5R6F160T
		8×12	172	EGW2VM6R8F120T
	6.8	8×16	190	EGW2VM6R8F160T
		8×16	215	EGW2VM8R2F160T
	8.2	10×12	215	EGW2VM8R2G120T
		8×20	260	EGW2VM100F200T
	10	10×12	230	EGW2VM100G120T
		10×16	340	EGW2VM150G160T
	22	10×20	460	EGW2VM220G200T
		12.5×20	600	EGW2VM330W200T
	33	16×20	650	EGW2VM330L200T
		16×20	700	EGW2VM470L200T
	47	16×25	780	EGW2VM680L250T
	68	18×20	780	EGW2VM680M200T
		16×30	1000	EGW2VM820L300T
	82	18×25	1000	EGW2VM820M250T
		18×25	1120	EGW2VM101M250T
	100	18×30	1210	EGW2VM101M300T
400(2G)	1	6.3×7	61	EGW2GM010E070T
		6.3×9	65	EGW2GM010E090T
	1.2	6.3×9	68	EGW2GM1R2E090T
		6.3×9	70	EGW2GM1R5E090T
	1.5	6.3×12	74	EGW2GM1R5E120T
		8×9	72	EGW2GM1R5F090T
		6.3×9	72	EGW2GM1R8E090T
	1.8	6.3×12	80	EGW2GM1R8E120T
		8×9	76	EGW2GM1R8F090T
		6.3×9	76	EGW2GM2R2E090T
	2.2	6.3×12	85	EGW2GM2R2E120T
		8×9	85	EGW2GM2R2F090T
		8×12	90	EGW2GM2R2F120T

WV (Vdc)	Cap (μF)	Size ΦD×L(mm)	Rated ripple current	Part Number
400(2G)	2.8	6.3×12	90	EGW2GM2R8E120T
		8×9	90	EGW2GM2R8F090T
		8×12	94	EGW2GM2R8F120T
	3.3	6.3×12	90	EGW2GM3R3E120T
		8×9	100	EGW2GM3R3F090T
		8×12	102	EGW2GM3R3F120T
	4.7	8×10	110	EGW2GM4R7F100T
		8×12	120	EGW2GM4R7F120T
		10×9	120	EGW2GM4R7G090T
		10×12	128	EGW2GM4R7G120T
		8×12	145	EGW2GM5R6F120T
	5.6	10×12	156	EGW2GM5R6G120T
	6.8	8×12	172	EGW2GM6R8F120T
		8×16	206	EGW2GM6R8F160T
		10×12	206	EGW2GM6R8G120T
	8.2	10×12	220	EGW2GM8R2G120T
		10×16	232	EGW2GM8R2G160T
	10	10×16	253	EGW2GM100G160T
		10×20	275	EGW2GM100G200T
	12	10×16	270	EGW2GM120G160T
		10×20	280	EGW2GM120G200T
	15	10×20	324	EGW2GM150G200T
		12.5×16	324	EGW2GM150W160T
	22	12.5×20	480	EGW2GM220W200T
		12.5×25	500	EGW2GM220W250T
	33	12.5×25	550	EGW2GM330W250T
		16×20	585	EGW2GM330L200T
	47	16×20	650	EGW2GM470L200T
		16×25	730	EGW2GM470L250T
450(2W)	56	16×30	770	EGW2GM560L300T
	68	16×30	810	EGW2GM680L300T
		18×25	830	EGW2GM680M250T
	82	18×30	980	EGW2GM820M300T
	100	18×30	1025	EGW2GM101M300T
	150	18×40	1340	EGW2GM151M400T
	180	18×45	1470	EGW2GM181M450T
	1	6.3×9	76	EGW2WM010E090T
		6.3×12	77	EGW2WM010E120T
	1.2	8×9	80	EGW2WM1R2F090T
	1.5	8×9	82	EGW2WM1R5F090T
		8×12	85	EGW2WM1R5F120T
	1.8	8×9	85	EGW2WM1R8F090T
		8×12	88	EGW2WM1R8F120T
		10×9	90	EGW2WM1R8G090T
		8×9	86	EGW2WM2R2F090T
	2.2	8×12	92	EGW2WM2R2F120T
		10×9	92	EGW2WM2R2G090T
	2.8	8×12	95	EGW2WM2R8F120T
		10×9	95	EGW2WM2R8G090T
	3.3	8×12	94	EGW2WM3R3F120T
		10×9	98	EGW2WM3R3G090T
	3.9	8×12	110	EGW2WM3R9F120T
		10×9	115	EGW2WM3R9G090T
	4.7	8×12	115	EGW2WM4R7F120T
		10×12	123	EGW2WM4R7G120T
		10×16	130	EGW2WM4R7G160T
		10×12	142	EGW2WM5R6G120T
	5.6	10×16	167	EGW2WM5R6G160T
	6.8	10×12	175	EGW2WM6R8G120T
		10×16	195	EGW2WM6R8G160T
	8.2	10×16	220	EGW2WM8R2G160T
		10×20	230	EGW2WM8R2G200T
	10	10×16	255	EGW2WM100G160T
		10×20	300	EGW2WM100G200T

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■ STANDARD RATINGS (Rated ripple current: mArms/105°C 100kHz)

WV (Vdc)	Cap (μF)	Size ΦD×L(mm)	Rated ripple current	Part Number
450(2W)	15	12.5×16	365	EGW2WM150W16OT
		12.5×20	410	EGW2WM150W20OT
		12.5×20	480	EGW2WM220W20OT
	22	12.5×25	530	EGW2WM220W25OT
		16×20	530	EGW2WM220L20OT
	33	16×20	600	EGW2WM330L20OT
		16×25	720	EGW2WM470L25OT
	47	16×30	800	EGW2WM470L30OT
		16×30	990	EGW2WM560L30OT
	56	18×25	1000	EGW2WM560M25OT
		18×25	1150	EGW2WM680M25OT
	68	18×30	1230	EGW2WM680M30OT
		18×30	1320	EGW2WM820M30OT
	100	18×35	1370	EGW2WM101M35OT
500(2H)	10	12.5×20	288	EGW2HM100W20OT
		12.5×25	302	EGW2HM100W25OT
	15	12.5×25	396	EGW2HM150W25OT
		16×20	396	EGW2HM150L20OT
	22	12.5×35	504	EGW2HM220W35OT
		16×25	504	EGW2HM220L25OT
	33	18×25	630	EGW2HM330M25OT
	47	18×30	792	EGW2HM470M30OT
	56	18×30	860	EGW2HM560M30OT
	68	18×35	1000	EGW2HM680M35OT
		22×35	1070	EGW2HM680O35OT
	82	22×35	1220	EGW2HM820O35OT
	100	22×35	1420	EGW2HM101O35OT