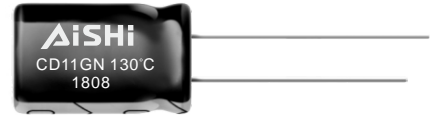


# CD11GN series

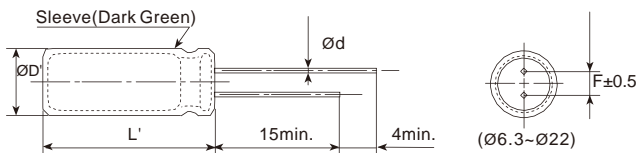
- Endurance: +130°C 1,000~2,000 hours; +105°C 8,000~12,000 hours
- Withstand high temperature, miniaturized, long life
- Suitable for output circuit and input circuit of LED driving power.
- **RoHS Compliant**



## SPECIFICATIONS

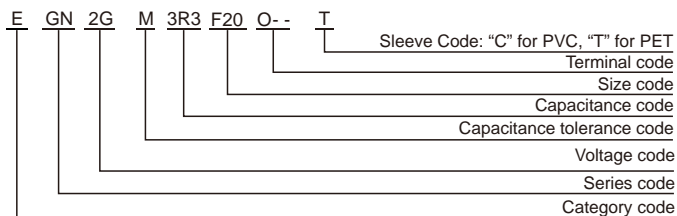
Items	Characteristics							
Category Temperature Range	-40~+130°C(160~ 450 V <sub>dc</sub> )				-40~+105°C(500 V <sub>dc</sub> )			
Rated Voltage Range	160~500 V <sub>dc</sub>							
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)							
Leakage Current	160~400 V <sub>dc</sub>	450~500 V <sub>dc</sub>		Where, I: Max.leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage (V)				
	I 0.02CV+10μA	I 0.03CV+10μA		(at 20°C after 2 minutes)				
Dissipation Factor (tan δ)	Rated Voltage(V <sub>dc</sub> )	160	200	250	350	400	450	500
	tan δ (max.)	0.15	0.15	0.15	0.20	0.20	0.20	0.24
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V <sub>dc</sub> )	160	200	250	350	400	450	500
	Z(-25°C)/Z(+20°C)	3	3	3	5	5	6	6
	Z(-40°C)/Z(+20°C)	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 rated ripple current is applied for a specified period of time at 130°C or 105°C, the peak voltage shall not exceed the rated voltage.							
	Capacitance Change	±20% of the initial value			Case Dia. (mm)	130°C Load life (hours)	105°C Load life (hours)	
	D.F. (tan δ)	200% of the initial specified value			ØD=6.3	160~450WV	160~450WV	500WV
	Leakage Current	The initial specified value			ØD 8	1,000	8,000	10,000
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. (tan δ)	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	0.8	0.8	0.8
F	2.5	3.5		5.0	5.0	7.5	10
ØD'	ØD+0.5max.						
L'	L+2max.						

## PART NUMBERING SYSTEM



## RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Cap.(μF)	Freq.(Hz)			
	120	1k	10k	100k
Cap.<33	0.40	0.70	0.90	1.00
Cap. 33	0.50	0.80	0.90	1.00

# CD11GN series

■ STANDARD RATINGS (Rated ripple current: mA rms/105°C 100kHz or mA rms/130°C 100kHz)

WV (Vdc)	Cap (µF)	Size D×L(mm)	Rated ripple current (105°C)	Rated ripple current (130°C)	Part Number
160 (2C)	1	6.3×7	40	26	EGN2CM010E07OT
		6.3×9	45	30	EGN2CM010E09OT
	1.5	6.3×7	46	31	EGN2CM1R5E07OT
		6.3×9	50	34	EGN2CM1R5E09OT
	1.8	6.3×7	53	35	EGN2CM1R8E07OT
		6.3×9	58	38	EGN2CM1R8E09OT
	2.2	6.3×7	58	38	EGN2CM2R2E07OT
		6.3×9	64	42	EGN2CM2R2E09OT
	2.8	6.3×7	61	40	EGN2CM2R8E07OT
		6.3×9	68	45	EGN2CM2R8E09OT
	3.3	6.3×9	72	47	EGN2CM3R3E09OT
	4.7	6.3×9	76	49	EGN2CM4R7E09OT
		8×9	82	54	EGN2CM4R7F09OT
	5.6	8×9	88	58	EGN2CM5R6F09OT
	6.8	8×9	100	65	EGN2CM6R8F09OT
		8×9	170	110	EGN2CM100F09OT
	10	8×12	190	124	EGN2CM100F12OT
		8×9	230	150	EGN2CM150F09OT
	15	8×12	255	165	EGN2CM150F12OT
		8×12	340	221	EGN2CM220F12OT
	22	10×12	420	273	EGN2CM220G12OT
		10×16	520	340	EGN2CM330G16OT
	47	10×16	570	371	EGN2CM470G16OT
		10×20	595	387	EGN2CM470G20OT
68	10×20	680	442	EGN2CM680G20OT	
	12.5×16	680	442	EGN2CM680W16OT	
100	12.5×20	1100	715	EGN2CM101W20OT	
	12.5×25	1120	728	EGN2CM101W25OT	
150	12.5×25	1200	780	EGN2CM151W25OT	
	16×20	1200	780	EGN2CM151L20OT	
220	16×25	1400	910	EGN2CM221L25OT	
330	18×30	1655	1075	EGN2CM331M30OT	
200 (2D)	1	6.3×7	46	31	EGN2DM010E07OT
		6.3×9	52	40	EGN2DM010E09OT
	1.5	6.3×7	52	40	EGN2DM1R5E07OT
		6.3×9	56	42	EGN2DM1R5E09OT
	1.8	6.3×7	56	40	EGN2DM1R8E07OT
		6.3×9	60	45	EGN2DM1R8E09OT
	2.2	6.3×9	68	50	EGN2DM2R2E09OT
		6.3×12	74	55	EGN2DM2R2E12OT
	2.8	6.3×9	74	55	EGN2DM2R8E09OT
		6.3×12	80	60	EGN2DM2R8E12OT
	3.3	6.3×9	86	65	EGN2DM3R3E09OT
		6.3×12	96	72	EGN2DM3R3E12OT
	4.7	6.3×12	128	102	EGN2DM4R7E12OT
		8×9	135	107	EGN2DM4R7F09OT
	5.6	8×12	154	122	EGN2DM4R7F12OT
		8×9	150	120	EGN2DM5R6F09OT
	6.8	8×12	165	132	EGN2DM5R6F12OT
		8×9	158	125	EGN2DM6R8F09OT
	8.2	8×12	175	140	EGN2DM6R8F12OT
		8×9	180	144	EGN2DM8R2F09OT
	10	8×12	195	150	EGN2DM8R2F12OT
		8×9	210	158	EGN2DM100F09OT
	15	8×12	240	168	EGN2DM100F12OT
		8×12	325	228	EGN2DM150F12OT
22	8×16	338	235	EGN2DM150F16OT	
	8×20	382	248	EGN2DM220F20OT	
22	10×16	446	290	EGN2DM220G16OT	
	10×20	492	320	EGN2DM220G20OT	

WV (Vdc)	Cap (µF)	Size D×L(mm)	Rated ripple current (105°C)	Rated ripple current (130°C)	Part Number	
200 (2D)	33	10×20	570	370	EGN2DM330G20OT	
		12.5×16	570	370	EGN2DM330W16OT	
		12.5×20	600	390	EGN2DM330W20OT	
	47	12.5×16	600	390	EGN2DM470W16OT	
		12.5×20	628	408	EGN2DM470W20OT	
		12.5×25	660	430	EGN2DM470W25OT	
	68	12.5×25	760	494	EGN2DM680W25OT	
		16×20	800	520	EGN2DM680L20OT	
		82	16×20	880	572	EGN2DM820L20OT
	100	12.5×30	1010	657	EGN2DM101W30OT	
		16×25	1060	690	EGN2DM101L25OT	
	150	12.5×40	1120	728	EGN2DM151W40OT	
		16×30	1220	793	EGN2DM151L30OT	
	250 (2E)	1	6.3×7	46	31	EGN2EM010E07OT
			6.3×9	52	40	EGN2EM010E09OT
1.5		6.3×7	52	40	EGN2EM1R5E07OT	
		6.3×9	56	42	EGN2EM1R5E09OT	
1.8		6.3×7	56	40	EGN2EM1R8E07OT	
		6.3×9	60	45	EGN2EM1R8E09OT	
2.2		6.3×9	68	50	EGN2EM2R2E09OT	
		6.3×12	74	55	EGN2EM2R2E12OT	
2.8		6.3×9	74	55	EGN2EM2R8E09OT	
		6.3×12	84	62	EGN2EM2R8E12OT	
3.3		6.3×9	86	65	EGN2EM3R3E09OT	
		6.3×12	100	74	EGN2EM3R3E12OT	
4.7		8×9	120	95	EGN2EM4R7F09OT	
		8×12	154	122	EGN2EM4R7F12OT	
5.6		8×9	150	120	EGN2EM5R6F09OT	
	8×12	165	132	EGN2EM5R6F12OT		
6.8	8×9	158	125	EGN2EM6R8F09OT		
	8×12	216	162	EGN2EM6R8F12OT		
8.2	8×12	245	180	EGN2EM8R2F12OT		
	8×16	274	192	EGN2EM8R2F16OT		
	10×9	235	172	EGN2EM8R2G09OT		
10	8×12	265	185	EGN2EM100F12OT		
	8×16	294	205	EGN2EM100F16OT		
15	8×16	340	221	EGN2EM150F16OT		
	8×20	378	245	EGN2EM150F20OT		
22	10×16	462	300	EGN2EM220G16OT		
	12.5×16	550	358	EGN2EM330W16OT		
33	12.5×20	610	398	EGN2EM330W20OT		
	12.5×16	610	398	EGN2EM470W16OT		
47	12.5×20	648	420	EGN2EM470W20OT		
	12.5×25	805	523	EGN2EM680W25OT		
68	16×20	830	540	EGN2EM680L20OT		
	12.5×35	966	628	EGN2EM101W35OT		
100	16×25	1030	668	EGN2EM101L25OT		
	12.5×50	1288	838	EGN2EM151W50OT		
150	16×35	1400	910	EGN2EM151L35OT		
	18×25	1330	865	EGN2EM151M25OT		

Radial Type

# CD11GN series

■ STANDARD RATINGS (Rated ripple current: mA rms/105°C 100kHz or mA rms/130°C 100kHz)

WV (Vdc)	Cap (μF)	Size D×L(mm)	Rated ripple current (105°C)	Rated ripple current (130°C)	Part Number
350 (2V)	1	6.3x9	52	40	EGN2VM010E09OT
	1.5	6.3x12	65	50	EGN2VM1R5E12OT
		8x9	68	52	EGN2VM1R5F09OT
	1.8	6.3x12	70	54	EGN2VM1R8E12OT
		8x9	74	57	EGN2VM1R8F09OT
	2.2	6.3x12	78	60	EGN2VM2R2E12OT
		8x9	82	63	EGN2VM2R2F09OT
	2.8	8x9	86	65	EGN2VM2R8F09OT
		8x12	90	68	EGN2VM2R8F12OT
	3.3	8x9	95	71	EGN2VM3R3F09OT
		8x12	100	75	EGN2VM3R3F12OT
	4.7	8x12	135	108	EGN2VM4R7F12OT
	5.6	8x12	140	109	EGN2VM5R6F12OT
		8x16	160	125	EGN2VM5R6F16OT
	6.8	8x16	170	123	EGN2VM6R8F16OT
		8x20	195	142	EGN2VM6R8F20OT
	8.2	8x20	250	164	EGN2VM8R2F20OT
	10	10x16	275	178	EGN2VM100G16OT
		10x20	300	195	EGN2VM100G20OT
	15	10x20	380	247	EGN2VM150G20OT
22	12.5x20	476	309	EGN2VM220W20OT	
33	16x20	600	390	EGN2VM330L20OT	
47	16x20	740	480	EGN2VM470L20OT	
68	18x25	880	572	EGN2VM680M25OT	
100	18x30	1160	754	EGN2VM101M30OT	
400 (2G)	1	6.3x9	62	55	EGN2GM010E09OT
		6.3x12	66	60	EGN2GM010E12OT
	1.2	6.3x12	68	62	EGN2GM1R2E12OT
	1.5	8x9	75	68	EGN2GM1R5F09OT
		8x12	86	75	EGN2GM1R5F12OT
	1.8	8x9	80	70	EGN2GM1R8F09OT
		8x12	90	78	EGN2GM1R8F12OT
	2.2	6.3x12	87	72	EGN2GM2R2E12OT
		8x12	92	80	EGN2GM2R2F12OT
	2.8	8x12	108	85	EGN2GM2R8F12OT
		8x16	120	96	EGN2GM2R8F16OT
	3.3	8x12	120	96	EGN2GM3R3F12OT
		8x16	128	102	EGN2GM3R3F16OT
	4.7	8x12	148	110	EGN2GM4R7F12OT
		8x16	158	120	EGN2GM4R7F16OT
	5.6	8x12	153	116	EGN2GM5R6F12OT
		10x12	162	122	EGN2GM5R6G12OT
	5.6	10x16	180	135	EGN2GM5R6G16OT
		8x20	202	142	EGN2GM6R8F20OT
	6.8	10x16	210	148	EGN2GM6R8G16OT
		10x16	252	164	EGN2GM8R2G16OT
	8.2	10x20	266	174	EGN2GM8R2G20OT
		10x16	288	187	EGN2GM100G16OT
	10	10x20	304	198	EGN2GM100G20OT
		8x40	340	220	EGN2GM150F40OT
	15	12.5x16	360	234	EGN2GM150W16OT
		12.5x20	400	260	EGN2GM150W20OT
	22	8x50	476	310	EGN2GM220F50OT
		12.5x20	490	318	EGN2GM220W20OT
	22	12.5x25	532	346	EGN2GM220W25OT
		10x45	627	408	EGN2GM330G45OT
	33	16x20	560	364	EGN2GM330L20OT

WV (Vdc)	Cap (μF)	Size D×L(mm)	Rated ripple current (105°C)	Rated ripple current (130°C)	Part Number
400 (2G)	47	12.5x40	660	429	EGN2GM470W40OT
		16x25	700	455	EGN2GM470L25OT
		12.5x55	870	566	EGN2GM680W55OT
	68	18x25	835	543	EGN2GM680M25OT
		18x35	1090	708	EGN2GM101M35OT
450 (2W)	1	8x9	64	56	EGN2WM010F09OT
		8x12	68	62	EGN2WM010F12OT
	1.5	8x12	84	74	EGN2WM1R5F12OT
		10x9	90	76	EGN2WM1R5G09OT
	1.8	8x12	90	76	EGN2WM1R8F12OT
		10x9	95	80	EGN2WM1R8G09OT
	2.2	8x16	92	78	EGN2WM2R2F16OT
	2.8	8x16	120	96	EGN2WM2R8F16OT
	3.3	8x16	125	100	EGN2WM3R3F16OT
	4.7	8x20	168	125	EGN2WM4R7F20OT
		10x12	150	110	EGN2WM4R7G12OT
	5.6	10x16	180	135	EGN2WM5R6G16OT
	6.8	10x16	200	132	EGN2WM6R8G16OT
		10x20	220	154	EGN2WM6R8G20OT
	8.2	10x16	235	153	EGN2WM8R2G16OT
10x20		266	174	EGN2WM8R2G20OT	
10	10x25	304	198	EGN2WM100G25OT	
	12.5x16	290	188	EGN2WM100W16OT	
15	8x45	400	260	EGN2WM150F45OT	
	12.5x20	400	260	EGN2WM150W20OT	
22	10x40	500	325	EGN2WM220G40OT	
	16x20	500	325	EGN2WM220L20OT	
	10x50	615	400	EGN2WM330G50OT	
33	16x25	665	432	EGN2WM330L25OT	
	12.5x45	720	468	EGN2WM470W45OT	
47	16x35	818	532	EGN2WM470L35OT	
	18x30	900	585	EGN2WM680M30OT	
68	18x35	1110	722	EGN2WM101M35OT	
	18x40	1180	768	EGN2WM101M40OT	
500 (2H)	10	12.5x20	288	/	EGN2HM100W20OT
		12.5x25	302	/	EGN2HM100W25OT
	15	12.5x25	396	/	EGN2HM150W25OT
		16x20	396	/	EGN2HM150L20OT
	22	12.5x35	504	/	EGN2HM220W35OT
		16x25	504	/	EGN2HM220L25OT
	33	18x25	630	/	EGN2HM330M25OT
	47	18x30	792	/	EGN2HM470M30OT
	68	22x35	1100	/	EGN2HM680O35OT
	82	22x35	1200	/	EGN2HM820O35OT
100	22x35	1480	/	EGN2HM101O35OT	