



CAP-XX Single Cell Supercapacitors

Unparalleled combination of performance and value

The CAP-XX single cell **supercapacitor** range provides excellent peak power performance at a very competitive cost.



Excellent peak power delivery in a single cell supercapacitor

The new CAP-XX GY12R7 range of cylindrical supercapacitors provide excellent pulse power handling characteristics resulting from the combination of very high capacitance and relatively low ESR.

The GY12R7 series provides a cost-effective solution to solve the power performance limitations of low power batteries in a range of consumer and industrial applications.

When used in conjunction with a low power energy source such as an energy harvester and or low power battery, the CAP-XX GY12R7 series of cylindrical supercapacitors enable extended back up time, longer battery life, and the provision of peak power as required.

Main Features

- High pulse power capability
- Low ESR
- Low leakage current
- Long life
- Meet environmental standards for disposal and operation (RoHS)

Applications

- Energy harvesting for wireless sensors
- Energy harvesting for wireless HVAC sensors and actuators
- Peak power support for GSM/GPRS transmission
- Last gasp power for remote meter status transmission
- Peak power support for locks and actuators
- Peak power support for portable drug delivery systems
- Short term bridging power for battery hot swaps

CAP-XX Single Cell Supercapacitors

Part Numbering Method Single Cell

G	Y	N	vvv	dd	mm	S	ccc	R
Model	Cylindrical	no of cells 1	Voltage 2R7 = 2.7V	Diameter 6C = 6.3mm 08 = 8.0mm 10 = 10mm 1B = 12.5mm	Length 012 = 12mm 068 = 68mm 120 = 120mm	Tolerance M ± 20% S +30% / -10% V +25% / -5%	µF (micro-F) Two digits + number of zeros.	Lead format R = radial S = 2 solder pins W = 4 Cu tabs

High Capacitance Cylindrical Supercapacitors

Radial Lead Type / Rated Voltage 2.7V / Temperature Range -40°C to +65°C

CAP-XX Part No.	Cap (Capacitance)	Diameter (mm)	Length (mm)	DCL max @ 72 Hrs (µA)	ESR max @ 1KHz (mΩ)	ESR max @ DC (mΩ)	Power Density (W/kg)	Max Energy (Wh)	Energy Density (Wh/kg)
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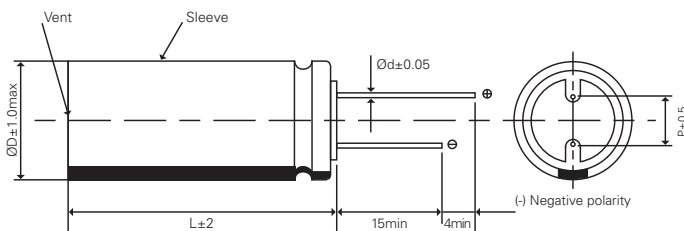
Radial Lead

GY12R76C012S105R	1	6.3	12	5	400	1500	972	0.0010	1.69
GY12R708012S105R	1	8	12	6	180	860	1209	0.0010	1.20
GY12R708016S205R	2	8	16	10	100	360	2274	0.0020	1.90
GY12R708020S335R	3.3	8	20	12	95	280	2526	0.0033	2.70
GY12R710020S505R	5	10	20	15	70	170	2441	0.0051	2.40
GY12R710025S705R	7	10	25	20	60	150	2303	0.0071	2.80
GY12R710030S106R	10	10	30	30	50	75	3800	0.0101	3.30
GY12R71B020S106R	10	12.5	20	30	50	75	3454	0.0101	3.00
GY12R71B030S156R	15	12.5	30	50	40	60	3359	0.0152	3.50
GY12R71B035M226R	22	12.5	35	60	34	55	2514	0.0223	3.71
GY12R716025M256R	25	16	25	60	27	50	2419	0.0253	3.50
GY12R716030M306R	30	16	30	70	20	40	2644	0.0304	3.70
GY12R718040M506R	50	18	40	75	18	20	3456	0.0506	4.00
GY12R718060M107R	100	18	60	260	15	18	2352	0.1013	4.90

Solder Pin Lead & Tab

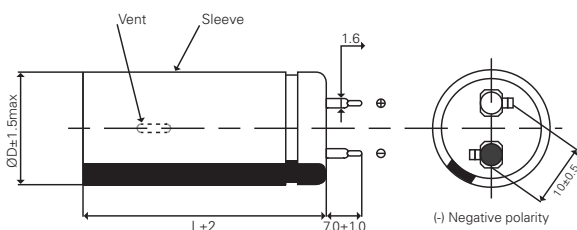
GY12R722045V107S	100	22	45	260	8	12	3391	0.1013	4.71
GY12R730050V207S	200	30	50	600	6	8	2457	0.2025	4.55
GY12R735062V307W	300	35	62	950	4	5	2333	0.3038	4.05
GY12R735068V407W	400	35	68	1000	3	3.5	2941	0.4050	4.76

Radial Lead Type IF - 100F

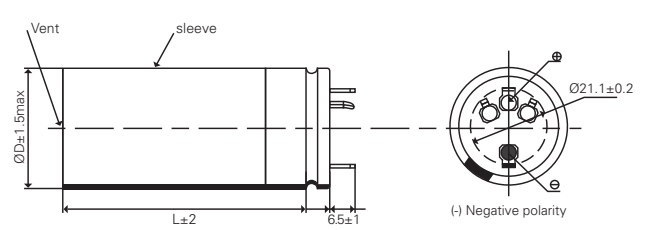


D	P	d
6.3	2.3	0.6
8	3.5	0.6
10	5.5	0.6
12.5	5.5	0.6
16	8	0.8
18	8	0.8

Solder Pin Type 2-pin 100F, 200F parts



Solder Tab Type 4-pin 300F, 400F parts



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