Low Impedance/Low ESR Capacitors
MCGLR Series

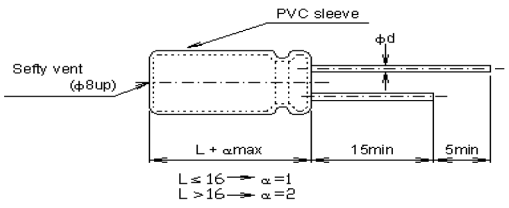
Features:

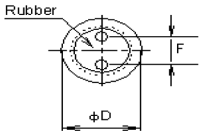
- Material : Aluminium.
- Low ESR.
- MCGLR series aluminium electrolytic capacitors are high reliable with low impedance, low ESR and guaranteed 2,000 hours at 105°C.
- Suitable for switching power and automobile industry.

Specifications:

Item	Performance
Operating Temperature Range	-55°C to+105°C
Rated Working Voltage Range	6.3V DC to 100V DC
Nominal Capacitance Range	0.47μF to 4,700μF
Capacitance Tolerance	±20% (at+20°C, 120Hz)
Leakage Current	I≤0.01CV or 3(μA) after three minutes Application of rated working voltage at +20ºC
Dissipation Factor(tanδ) (120Hz\+20°C)	Working Voltage (V) 6.3 10 16 25 35 50 63 100 tanδ max. 0.18 0.12 0.1 0.08 0.07 0.06 0.05 0.05
Characteristics at Low Temperature (stability at 120Hz)	Working Voltage (V) 6.3 10 16 25 35 50 63 100 -25ºC/+20ºC 4 3 2 2 2 2 2 2 -40ºC/+20ºC 8 4 3 3 3 3 4 4
High Temperature Loading	After 5,000hrs. application of DC rated working voltage at +105ºC, The capacitor shall meet the following limits: Leakage current ≤ the Initial specified value Capacitance change ≤ ±15% of initial measured value Dissipation Factor (tanδ) ≤150% of initial specified value
Shelf Life	After storage for 1000hrs. at +105°C with no voltage applied. Post test requirements at +20°C Same limits as high temperature loading.
Solvent proof	This capacitor can withstand circuit-board cleaning within 5 min. dipped in Freon TE, TES, at 40°C (ultrasonic also permitted) or in the steam of these cleaners.

Diagram of Dimensions





Dø (+0.5 Max)	8	10	13	16	18
F (±0.5)	3.5	5	5	7.5	7.5
dø (±0.02)	0.6	0.6	0.6	0.8	0.8

Dimensions : Millimetres

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multicomp PRO

Case Size Table

ø D × L (mm)

W.V. (SV) / µF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
1						5 × 11		5 × 11
2.2						5 × 11		5 × 11
3.3						5 × 11		5 × 11
4.7						5 × 11		5 × 11
10						5 × 11		6.3 × 11
22						5 × 11		8 × 12
33			5 × 11	6.3 × 11	6.3 × 11	6.3 × 11		8 × 14
47			5 × 11	6.3 × 11	6.3 × 11	8 × 11		10 × 17
68								
100		5 × 11	6.3 × 11	8 × 11	8 × 11	10 × 13		10 × 20
220		6.3 × 11	8 × 11	8 × 14	10 × 16	10 × 21		
330		8 × 11	8 × 14	10 × 16	10 × 21	13 × 21		
470		8 × 11	10 × 16	10 × 16	10 × 21	13 × 26		
680								
1,000		10 × 16	10 × 16	13 × 21	16 × 26	16 × 32		
2,200		13 × 26	13 × 26					
3,300		13 × 25	16 × 32					
4,700		16 × 26	16 × 36					

Max. Ripple Current

[mA]rms max.(100kHz, +105°C)

W.V.(SV) µF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
0.47								
1.0						45		45
2.2						45		45
3.3						50		45
4.7						55		100
10						68		105
22						70		170
33			110	185	185	190		210
47			108	185	185	320		350
68								
100		102	180	330	350	360		530
220		180	330	360	450	460		
330		280	360	450	600	880		
470		300	450	520	600	1090		
680								
1,000		690	775	950	1075	1600		
2,200		1200	1300					
3,300		1200	1850					
4,700		1600	2070					

Max. Impedance

[Ω]max.(100kHz, +25°C)

W.V.(SV) µF	6.3 (8)	10 (13)	16 (20)	25 (32)	35 (44)	50 (63)	63 (79)	100 (125)
0.47								
1.0						4		4
2.2						4		4
3.3						3.5		3.5
4.7						3		3
10						2.2		2.2
22						2.2		2.2
33			1.4	0.7	0.6	0.6		0.6
47			1.4	0.6	0.6	0.35		0.35
68								
100		1.4	0.7	0.4	0.4	0.3		0.32
220		1.4	0.4	0.3	0.2	0.19		
330		1.2	0.3	0.2	0.14	0.13		
470		0.4	0.2	0.19	0.15	0.075		
680								
1,000		0.2	0.18	0.085	0.08	0.07		
2,200		0.07	0.07					
3,300		0.075	0.05					
4,700		0.06	0.045					

Part Number Table

Description	Part Number
Electrolytic Capacitor, 100µF, 10V, RAD	MCGLR10V107M5X11
Electrolytic Capacitor, 220µF, 10V, RAD	MCGLR10V227M6.3X11
Electrolytic Capacitor, 330µF, 10V, RAD	MCGLR10V337M8X11
Electrolytic Capacitor, 470µF, 10V, RAD	MCGLR10V477M8X11
Electrolytic Capacitor, 1000µF, 10V, RAD	MCGLR10V108M10X16
Electrolytic Capacitor, 2200µF, 10V, RAD	MCGLR10V228M13X26
Electrolytic Capacitor, 3300µF, 10V, RAD	MCGLR10V338M13X25
Electrolytic Capacitor, 4700µF, 10V, RAD	MCGLR10V478M16X26
Electrolytic Capacitor, 33µF, 16V, RAD	MCGLR16V336M5X11
Electrolytic Capacitor, 47µF, 16V, RAD	MCGLR16V476M5X11
Electrolytic Capacitor, 100µF, 16V, RAD	MCGLR16V107M6.3X11
Electrolytic Capacitor, 220µF, 16V, RAD	MCGLR16V227M8X11
Electrolytic Capacitor, 330µF, 16V, RAD	MCGLR16V337M8X14
Electrolytic Capacitor, 470µF, 16V, RAD	MCGLR16V477M10X16
Electrolytic Capacitor, 1000µF, 16V, RAD	MCGLR16V108M10X16
Electrolytic Capacitor, 2200µF, 16V, RAD	MCGLR16V228M13X26
Electrolytic Capacitor, 3300µF, 16V, RAD	MCGLR16V338M16X32
Electrolytic Capacitor, 4700µF, 16V, RAD	MCGLR16V478M16X36
Electrolytic Capacitor, 33µF, 25V, RAD	MCGLR25V336M6.3X11
Electrolytic Capacitor, 47µF, 25V, RAD	MCGLR25V476M6.3X11
Electrolytic Capacitor, 100µF, 25V, RAD	MCGLR25V107M8X11
Electrolytic Capacitor, 220µF, 25V, RAD	MCGLR25V227M8X14
Electrolytic Capacitor, 330µF, 25V, RAD	MCGLR25V337M10X16
Electrolytic Capacitor, 470µF, 25V, RAD	MCGLR25V477M10X16
Electrolytic Capacitor, 1000µF, 25V, RAD	MCGLR25V108M13X21
Electrolytic Capacitor, 33µF, 35V, RAD	MCGLR35V336M6.3X11
Electrolytic Capacitor, 47µF, 35V, RAD	MCGLR35V476M6.3X11

Description	Part Number
Electrolytic Capacitor, 100µF, 35V, RAD	MCGLR35V107M8X11
Electrolytic Capacitor, 220µF, 35V, RAD	MCGLR35V227M10X16
Electrolytic Capacitor, 330µF, 35V, RAD	MCGLR35V337M10X21
Electrolytic Capacitor, 470µF, 35V, RAD	MCGLR35V477M10X21
Electrolytic Capacitor, 1000µF, 35V, RAD	MCGLR35V108M16X26
Electrolytic Capacitor, 1µF, 50V, RAD	MCGLR50V105M5X11
Electrolytic Capacitor, 2.2µF, 50V, RAD	MCGLR50V225M5X11
Electrolytic Capacitor, 3.3µF, 50V, RAD	MCGLR50V335M5X11
Electrolytic Capacitor, 4.7µF, 50V, RAD	MCGLR50V475M5X11
Electrolytic Capacitor, 10µF, 50V, RAD	MCGLR50V106M5X11
Electrolytic Capacitor, 22µF, 50V, RAD	MCGLR50V226M5X11
Electrolytic Capacitor, 33µF, 50V, RAD	MCGLR50V336M6.3X11
Electrolytic Capacitor, 47µF, 50V, RAD	MCGLR50V476M8X11
Electrolytic Capacitor, 100µF, 50V, RAD	MCGLR50V107M10X13
Electrolytic Capacitor, 220µF, 50V, RAD	MCGLR50V227M10X21
Electrolytic Capacitor, 330µF, 50V, RAD	MCGLR50V337M13X21
Electrolytic Capacitor, 470µF, 50V, RAD	MCGLR50V477M13X26
Electrolytic Capacitor, 1000µF, 50V, RAD	MCGLR50V108M16X32
Electrolytic Capacitor, 1µF, 100V, RAD	MCGLR100V105M5X11
Electrolytic Capacitor, 2.2µF, 100V, RAD	MCGLR100V225M5X11
Electrolytic Capacitor, 3.3µF, 100V, RAD	MCGLR100V335M5X11
Electrolytic Capacitor, 4.7µF, 100V, RAD	MCGLR100V475M5X11
Electrolytic Capacitor, 10µF, 100V, RAD	MCGLR100V106M6.3X11
Electrolytic Capacitor, 22µF, 100V, RAD	MCGLR100V226M8X12
Electrolytic Capacitor, 33µF, 100V, RAD	MCGLR100V336M8X14
Electrolytic Capacitor, 47µF, 100V, RAD	MCGLR100V476M10X17
Electrolytic Capacitor, 100µF, 100V, RAD	MCGLR100V107M10X20