

QS

Snap-in Terminal type, 105°C High speed charge-discharge.

series

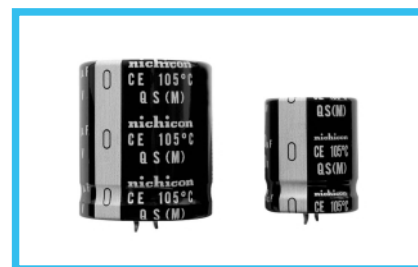


Smaller

QS



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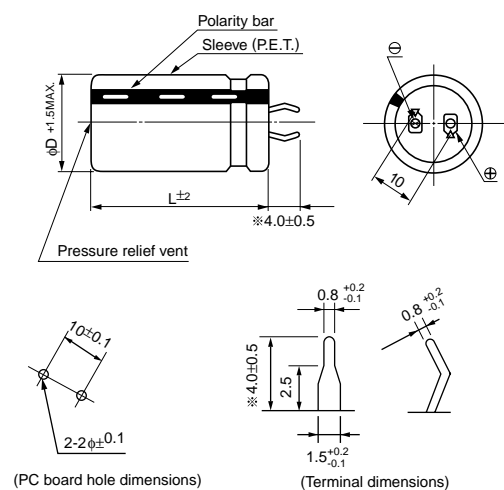


- Suited for high frequency regenerative voltage for AC servomotor, general inverter.
- Suited for equipment used at voltage fluctuating area.
- Suited for rectifier circuit of voltage doubler
- Compliant to the RoHS directive (2002/95/EC).

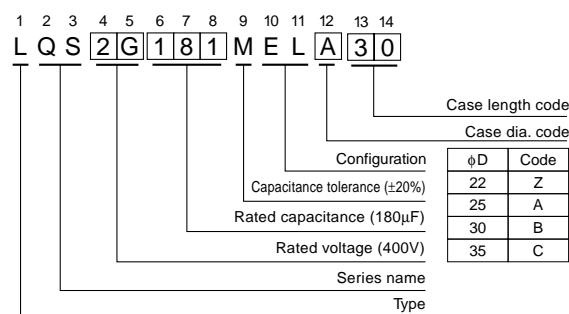
Specifications

Item	Performance Characteristics				
Category Temperature Range	- 25 to +105°C				
Rated Voltage Range	350 to 450V				
Rated Capacitance Range	82 to 820μF				
Capacitance Tolerance	±20% at 120Hz, 20°C				
Leakage Current	$I \leq 3\sqrt{C}$ (μA) (After 5 minutes' application of rated voltage [C : Rated Capacitance(μF), V : Voltage (V)])				
Tangent of loss angle (tan δ)	Measurement frequency : 120Hz, Temperature : 20°C				
	Rated voltage (V)	350	400	420	450
	tan δ (MAX.)	0.15	0.15	0.15	0.20
Stability at Low Temperature	Rated voltage (V)		350 to 450		Measurement frequency : 120Hz
	Impedance ratio ZT/Z20(MAX.)		Z - 25°C / Z+20°C		
			8		
Endurance of charge-discharge behavior	After an application of charge-discharge voltage for 50million times (charge-discharge voltage difference(ΔV) = rated voltage × 0.35, cycle 6Hz) capacitors shall meet the characteristics requirement listed at right.			Capacitance change	Within ±20% of the initial capacitance value
				tan δ	300% or less than the initial specified value
				Leakage current	Less than or equal to the initial specified value
				Appearance	There shall be found to remarkable abnormality on the capacitor
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 3000 hours at 105°C, the peak voltage shall not exceed the rated voltage.			Capacitance change	Within ±20% of the initial capacitance value
				tan δ	200% or less than the initial specified value
				Leakage current	Less than or equal to the initial specified value
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified value for endurance characteristics listed above.				
Marking	Printed with white color letter on black sleeve.				

Drawing



Type numbering system (Example : 400V 180μF)



※ Please contact to us if other configurations are required.

※ The other terminal is also available upon request.
Please refer page 272 for schematic of dimensions.

Minimum order quantity : 50pcs.

• Dimension table in next page.

■ Dimensions

350V (2V)				
Cap. (μ F)	Size ϕ D \times L(mm)	Rated ripple (mA)	Leakage Current (mA)	Code
120	22 \times 25	750	0.61	LQS2V121MELZ25
150	22 \times 30	820	0.68	LQS2V151MELZ30
180	22 \times 30	900	0.75	LQS2V181MELZ30
	25 \times 25	900	0.75	LQS2V181MELA25
220	22 \times 35	1000	0.83	LQS2V221MELZ35
	25 \times 30	1000	0.83	LQS2V221MELA30
270	22 \times 40	1100	0.92	LQS2V271MELZ40
	25 \times 35	1100	0.92	LQS2V271MELA35
	30 \times 25	1100	0.92	LQS2V271MELB25
330	22 \times 45	1200	1.01	LQS2V331MELZ45
	25 \times 40	1200	1.01	LQS2V331MELA40
	30 \times 30	1200	1.01	LQS2V331MELB30
390	25 \times 45	1300	1.10	LQS2V391MELA45
	30 \times 35	1300	1.10	LQS2V391MELB35
470	25 \times 50	1400	1.21	LQS2V471MELA50
	30 \times 40	1400	1.21	LQS2V471MELB40
	35 \times 30	1400	1.21	LQS2V471MELC30
560	30 \times 45	1500	1.32	LQS2V561MELB45
	35 \times 35	1500	1.32	LQS2V561MELC35
680	30 \times 50	1700	1.46	LQS2V681MELB50
	35 \times 40	1700	1.46	LQS2V681MELC40
820	35 \times 45	1900	1.60	LQS2V821MELC45

400V (2G)				
Cap. (μ F)	Size ϕ D \times L(mm)	Rated ripple (mA)	Leakage Current (mA)	Code
100	22 \times 25	680	0.60	LQS2G101MELZ25
120	22 \times 30	730	0.65	LQS2G121MELZ30
150	22 \times 35	850	0.73	LQS2G151MELZ35
180	22 \times 35	950	0.80	LQS2G181MELZ35
	25 \times 30	950	0.80	LQS2G181MELA30
	30 \times 25	950	0.80	LQS2G181MELB25
220	22 \times 45	1100	0.88	LQS2G221MELZ45
	25 \times 35	1100	0.88	LQS2G221MELA35
	30 \times 25	1100	0.88	LQS2G221MELB25
270	22 \times 50	1220	0.98	LQS2G271MELZ50
	25 \times 40	1220	0.98	LQS2G271MELA40
	30 \times 30	1220	0.98	LQS2G271MELB30
330	35 \times 25	1220	0.98	LQS2G271MELC25
	25 \times 45	1440	1.08	LQS2G331MELA45
390	30 \times 35	1440	1.08	LQS2G331MELB35
470	25 \times 50	1550	1.18	LQS2G391MELA50
	30 \times 40	1550	1.18	LQS2G391MELB40
	35 \times 30	1550	1.18	LQS2G391MELC30
560	30 \times 45	1680	1.30	LQS2G471MELB45
	35 \times 35	1680	1.30	LQS2G471MELC35
680	30 \times 50	1900	1.41	LQS2G561MELB50
	35 \times 40	1900	1.41	LQS2G561MELC40
820	35 \times 45	2120	1.56	LQS2G681MELC45

420V (W6)				
Cap. (μ F)	Size ϕ D \times L(mm)	Rated ripple (mA)	Leakage Current (mA)	Code
100	22 \times 25	660	0.61	LQSW6101MELZ25
120	22 \times 30	810	0.67	LQSW6121MELZ30
	25 \times 25	810	0.67	LQSW6121MELA25
150	22 \times 35	840	0.75	LQSW6151MELZ35
	25 \times 30	840	0.75	LQSW6151MELA30
180	22 \times 40	910	0.82	LQSW6181MELZ40
	25 \times 30	910	0.82	LQSW6181MELA30
	30 \times 25	910	0.82	LQSW6181MELB25
220	22 \times 45	1050	0.91	LQSW6221MELZ45
	25 \times 35	1050	0.91	LQSW6221MELA35
	30 \times 30	1050	0.91	LQSW6221MELB30
270	25 \times 40	1250	1.01	LQSW6271MELA40
	30 \times 30	1250	1.01	LQSW6271MELB30
	35 \times 25	1250	1.01	LQSW6271MELC25
330	25 \times 50	1420	1.11	LQSW6331MELA50
	30 \times 35	1420	1.11	LQSW6331MELB35
	35 \times 30	1420	1.11	LQSW6331MELC30
390	30 \times 40	1610	1.21	LQSW6391MELB40
	35 \times 35	1610	1.21	LQSW6391MELC35
470	30 \times 45	1860	1.33	LQSW6471MELB45
	35 \times 40	1860	1.33	LQSW6471MELC40
560	35 \times 45	2100	1.45	LQSW6561MELC45
680	35 \times 50	2200	1.60	LQSW6681MELC50

450V (2W)				
Cap. (μ F)	Size ϕ D \times L(mm)	Rated ripple (mA)	Leakage Current (mA)	Code
82	22 \times 25	640	0.57	LQS2W820MELZ25
100	22 \times 30	690	0.63	LQS2W101MELZ30
	25 \times 25	690	0.63	LQS2W101MELA25
120	22 \times 35	720	0.69	LQS2W121MELZ35
	25 \times 30	720	0.69	LQS2W121MELA30
150	22 \times 40	790	0.77	LQS2W151MELZ40
	25 \times 30	790	0.77	LQS2W151MELA30
	30 \times 25	790	0.77	LQS2W151MELB25
180	22 \times 45	870	0.85	LQS2W181MELZ45
	25 \times 35	870	0.85	LQS2W181MELA35
	30 \times 30	870	0.85	LQS2W181MELB30
220	25 \times 40	1050	0.94	LQS2W221MELA40
	30 \times 30	1050	0.94	LQS2W221MELB30
	35 \times 25	1050	0.94	LQS2W221MELC25
270	25 \times 50	1230	1.04	LQS2W271MELA50
	30 \times 35	1230	1.04	LQS2W271MELB35
	35 \times 30	1230	1.04	LQS2W271MELC30
330	30 \times 40	1380	1.15	LQS2W331MELB40
	35 \times 35	1380	1.15	LQS2W331MELC35
390	30 \times 50	1610	1.25	LQS2W391MELB50
	35 \times 40	1610	1.25	LQS2W391MELC40
470	35 \times 45	1780	1.37	LQS2W471MELC45
560	35 \times 50	1990	1.50	LQS2W561MELC50

Rated ripple current (mA_{rms}) at 105°C 120Hz

● Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	300	1k	10k	50k or more
Coefficient	0.77	0.82	1.00	1.16	1.30	1.41	1.43