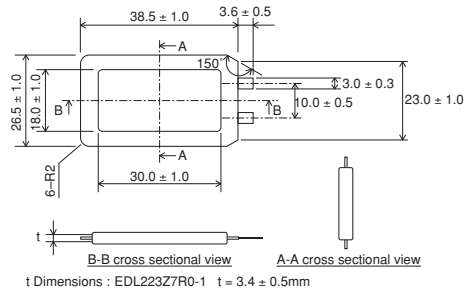
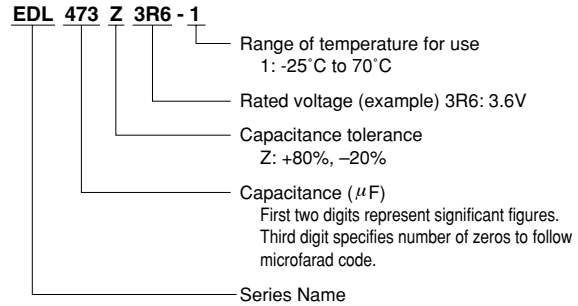


Super Capacitor Thin Type ED/L Series

Dimensions



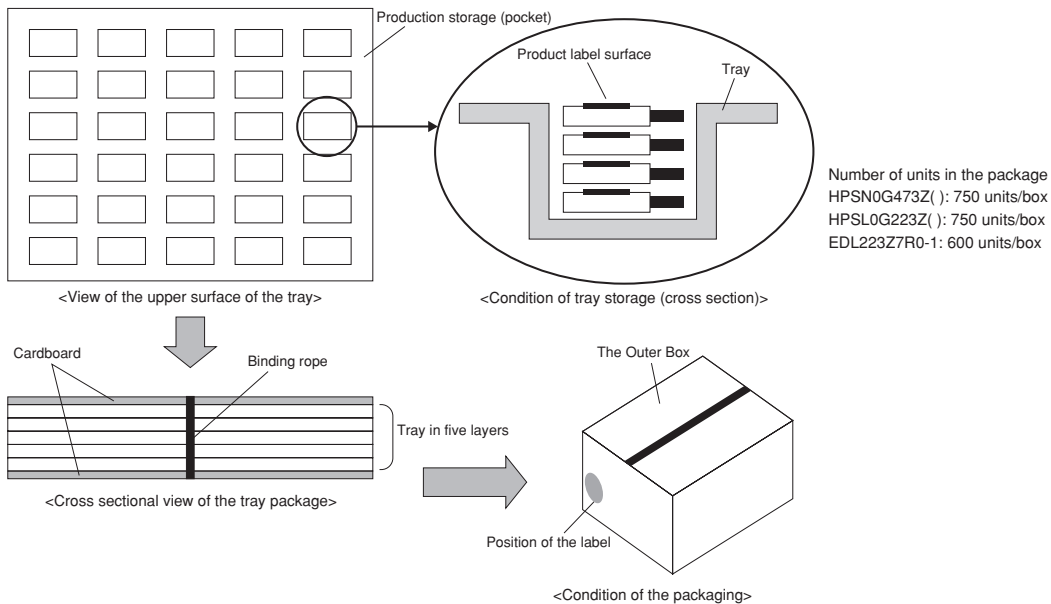
Part Number System



Standard Rating

Part Number	Rated Voltage (Vdc)	Maximum Operating Voltage (Vdc)	Nominal Capacitance (F)	ESR (mΩ)
EDL223Z7R0-1	7.0	7.8	0.022	300 or less

Packaging



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Specifications: ED/L Series

Item		Specifications		Test Condition (Refer to EIAJ RC-2377)															
Operating Temperature Range		-25°C to +70°C																	
Maximum Operating Voltage		Refer to standard ratings																	
Rated Voltage		Refer to standard ratings																	
Capacitance		Refer to standard ratings		Refer to characteristics measuring method															
Capacitance Allowance		+80%, -20%																	
ESR		Refer to standard ratings		Impedance method (at 1kHz)															
DC Leakage Current		5mA or less		Rated Voltage, R=100Ω, 5minute															
Lead Strength (Tensile)		No loosening nor permanent damage of the leads		Refer to "JIS C 5101-14.13"															
Surge Voltage		Capacitance	Initial requirement	Temp: 70 ± 2°C Voltage: EDL223Z7R0-1: 7.8V Charge: 30 sec. Discharge: 330 sec. 1000 cycles.															
		ESR	Shall not exceed 120% of initial requirements																
		LC	Initial requirement																
		Visual	There shall be no evidence of mechanical damage																
Vibration Resistance		Capacitance	Initial requirement	Frequency: 10 to 55 Hz Amplitude of vibration: 0.75mm 2 hr each in three directions															
		ESR																	
		LC																	
		Visual	There shall be no evidence of mechanical damage																
Soldering Heat Resistance		Capacitance	Initial requirement	Using soldering iron Iron temperature 320°C Max, Time 3 sec. Max. Iron power 30 W Max. (Attach at a point 2mm from the tip of the terminal)															
		ESR																	
		LC																	
		Visual	There shall be no evidence of mechanical damage																
Solderability		Over 75% of the terminal surface shall be covered by a continuous new solder coating after immersion		Refer to JIS C 5101-14.15 Solder temp.: 230±5°C Immersion time: 5±0.5 sec. Solder immersion: 1.5mm															
Temperature Variation of Characteristics		Step 2	Capacitance	Shall be exceed 50% of initial requirement	Measurements shall be made at each of the temperatures specified above after the capacitor has reached thermal stability Step 1: +20±2°C Step 2: -25±2°C Step 3: +20±2°C Step 4: +70±2°C Step 5: +20±2°C) Thermal stability The condition of thermal stability is judged to be reached when two readings of ESR taken at an interval of not less than 5 min do not differ by an amount greater than which can be attributed to the measuring apparatus.														
			ESR	Shall not be exceed 500% of initial requirement															
			LC	Initial requirement															
		Step 4	Capacitance	Shall not be exceed 200% of initial requirement															
			ESR	Initial requirement															
			LC																
		Step 5	Capacitance	Initial requirement															
			ESR																
		Step 5	LC	Initial requirement															
			Capacitance																
ESR																			
LC																			
Humidity Resistance		Capacitance	Within ±30% of initial requirement	Refer to JIS C 5101-14.22 Temperature: 40±2°C, Moisture: 90 to 95% R.H. Duration: 500(-0 to +24)hr, The specimen shall then remain under standard atmospheric condition for recovery for a period adequate for the attainment of temperature stability, with 12 to 24hr.															
		ESR	Shall not exceed 300% of initial requirement																
		LC	Initial requirement																
		Visual	There shall be no evidence of mechanical damage																
High Temperature Load		Capacitance	Within ±30% of initial requirement	Refer to JIS C 5101-14.23 Temperature: 70±2°C, Duration: 1000 (-0 to +48) hr, Rated voltage applied The specimen shall then remain under standard atmospheric condition for recovery for a period adequate for the attainment of temperature stability, with 12 to 24hr.															
		ESR	Shall not exceed 300% of initial requirements																
		LC	Initial requirement																
		Visual	There shall be no evidence of mechanical damage																
Temperature Cycle		Capacitance	Initial requirement	Refer to JIS C 5101-14.16 Temperature: -25 to 70°C															
		ESR																	
		LC																	
		Visual	There shall be no evidence of mechanical damage																
				<table border="1"> <thead> <tr> <th>Step</th> <th>Temp.</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-25°C</td> <td>30±3 min.</td> </tr> <tr> <td>2</td> <td>Room Temp.</td> <td>3min. Max.</td> </tr> <tr> <td>3</td> <td>+70°C</td> <td>30±3 min.</td> </tr> <tr> <td>4</td> <td>Room Temp.</td> <td>3min. Max.</td> </tr> </tbody> </table>	Step	Temp.	Time	1	-25°C	30±3 min.	2	Room Temp.	3min. Max.	3	+70°C	30±3 min.	4	Room Temp.	3min. Max.
Step	Temp.	Time																	
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