

## Low Profile Silicon Capacitor

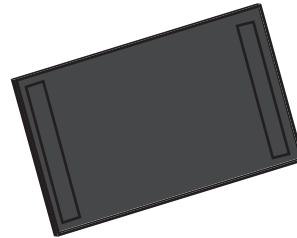
**LPSC0402 22nF**

**935.121.424.522**

The IPDiA Technology features High Reliability, up to 10 times better than alternative capacitor technologies & eliminates cracking phenomena.

Silicon Capacitor Technology also offers a very stable value over the full operating voltage & temperature range with a high & stable Insulation Resistance.

This silicon based technology is RoHS compliant and compatible with lead free reflow soldering process.



### Key Applications

- All Demanding Applications such as Medical, Telecom, Computer Industries
- High Reliability Applications
- Decoupling / Filtering / Charge Pump (ie. Pacemakers, Mobile Phones)
- Devices with Battery Operations
- Suitable for Embedded Technologies
- Extreme Miniaturization

### Key Features

- Ultra Low Profile (100µm)
- High Stability of Capacitance Value;
  - Temperature  $< \pm 0.5\%$  (-55 to +150°C)
  - Voltage  $< 0.1\%$  / V
  - Negligible Capacitance Loss through Ageing
- Unique High Capacitance in EIA/0201 Package Size, up to 10nF
- High Reliability (FIT  $< 0.017$  parts / billion hours)
- Low Leakage Current  $< 100\text{pA}$
- Low ESL and Low ESR
- Suitable with Lead Free Reflow-Soldering

### Part Number

**935.132.**

**B. 2**

**S.**

**U.**

**XX**

ie. 10nF/0201 case (LPSC type) → 935.121.423.510

↓  
**Breakdown**

**Voltage:**  
4 = 11V  
7 = 30V

↓  
**Size:**

2 = 1005  
3 = 0201  
4 = 0402

↓  
**Unit:**

0 = 10f    5 = 1n  
1 = 0.1p    6 = 10n  
2 = 1p    7 = 0.1u  
3 = 10p    8 = 1u  
4 = 0.1n    9 = 10u

↓  
**Value**

Parameters	Value
Capacitance Range	10nF
Capacitance Tolerances	$\pm 15\%$
Operating Temperature Range	-55°C to 150°C
Storage Temperatures	-70°C to 165°C
Temperature Coefficient	$< \pm 0.5\%$ , from -55°C to +150°C
Breakdown Voltage (BV)	11VDC, 30VDC
Capacitance Variation Vs. RVDC	0.1% / V (from 0 V to RVDC)
Equivalent Serial Inductor (ESL)	Max 100pH
Equivalent Serial Resistor (ESR)	Max 400mΩ
Insulation Resistance	100GΩ min @ 3V, 25°C
Ageing	Negligible, $< 0.001\%$ / 1000h
Reliability	FIT $< 0.017$ parts / billion hours
Capacitor Height	Max 100µm