



## **Low Profile Silicon Capacitor**

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

# LPSC0402 100pF 935.121.424.310





### **Key Features**

- Ultra Low Profile (100µm)
- High Stability of Capacitance Value;
  - Temperature <±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)

3 = 10p

8 = 1u

- Low Leakage Current < 100pA</li>
- Low ESL and Low ESR
- Suitable with Lead Free Reflow-Soldering

#### Part Number

935.132. **B. 2** S. Breakdown Size: Unit: ie. 10nF/0201 case (LPSC type) → 935.121.423.510 Voltage: 2 = 1005 0 = 10f5 = 1n3 = 0201 4 = 11V 1 = 0.1p6 = 10n7 = 30V 4 = 04027 = 0.1u2 = 1p

Parameters	Value
Capacitance Range	10nF
Capacitance Tolerances	±15%
Operating Temperature Range	-55°C to 150°C
Storage Temperatures	-70°C to 165°C
Temperature Coefficient	<±0.5%, from -55°C to +150°C
Breakdown Voltage (BV)	11VDC, 30VDC
Capacitance Variation Vs. RVDC	0.1% <i>N</i> (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