

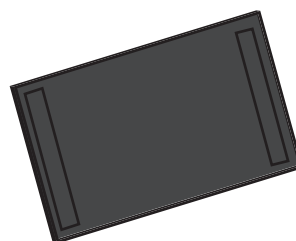
High Stability & Reliability Capacitor

HSSC0402 100nF

935.131.424.610

The IPDiA Technology offers industry leading performances relative to failure rate with a FIT<0.017. This technology also offers high reliability, up to 10 times better than alternative capacitor technologies & eliminates cracking phenomena.

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



Key Applications

- All Demanding Applications such as Military, Aerospace, Automotive Industry
- High Stability Applications
- Decoupling / Filtering / Charge Pump (ie. Pacemakers / Defibrillators)
- Devices with Battery Operations
- Replacement of X7R and NP0
- Downsizing

Key Features

- High Stability up to 200°C;
 - Temperature $< \pm 0.5\%$ (-55 to +150°C)
 - Voltage $< 0.1\%$ / V
 - Negligible Ageing $< 0.001\%$ / 1000hours
- Unique High Capacitance in EIA/1005 Package Size, up to 1.5nF
- High Reliability (FIT < 0.017 parts / billion hours)
- Low Leakage Current down to 100pA
- Low ESL and Low ESR
- Suitable with Lead Free Reflow-Soldering

Part Number

935.132.	B. 2	S.	U.	xx
	↓	↓	↓	↓
	Breakdown	Size:	Unit:	Value
ie. 1.5nF/0201 case (HSSC type) → 935.131.422.415	Voltage:	2 = 1005	0 = 10f	5 = 1n
	4 = 11V	3 = 0201	1 = 0.1p	6 = 10n
	7 = 30V	4 = 0402	2 = 1p	7 = 0.1u
			3 = 10p	8 = 1u
			4 = 0.1n	9 = 10u

Parameters	Value
Capacitance Range	1.5nF
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
Capacitance Variation Vs. RVDC	0.1% /V (from 0 V to RVDC)
Equivalent Serial Inductor (ESL)	Max 100pH
Equivalent Serial Resistor (ESR)	Max 200mΩ
Insulation Resistance	100GΩ min @ 3V, from -55°C to +150°C
Ageing	Negligible, $< 0.001\%$ / 1000h
Reliability	FIT < 0.017 parts / billion hours
Capacitor Height	Max 400μm