

Type:SHCJ1030V

◆ Product Description

- 10.2×14.3mm Max.(L×W)3.6mm Max. Height.
- Inductance Range: 0.15~4.70 μH
- In addition to the standards versions shown here,
- custom inductors are also available to meet your exact requirements.

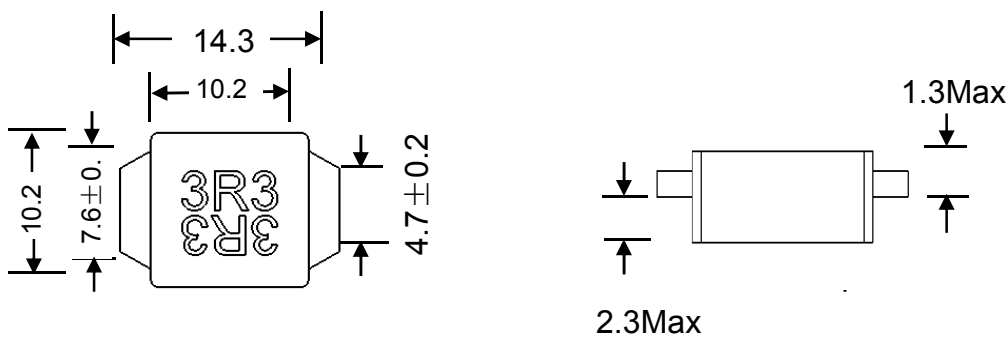
◆ Feature

- Lowest height in this package footprint
- Shielded construction
- Lowest DCR/μH, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- The products contain no lead and also support lead-free soldering.

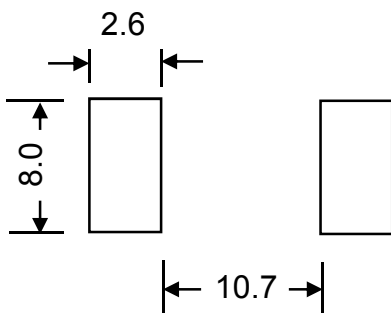
◆ Applications

- End products in voltage regulator module (VRM)
- PDA/Notebook/Desktop/Server applications
- High current POL converters
- Low profile,high current power supplies
- Battery powered devices
- DC/DC converters in distributed power systems
- DC/DC converter for Field Programmable Gate Array(FPGA)

◆ Dimensions (mm) General Tolerance:±0.3

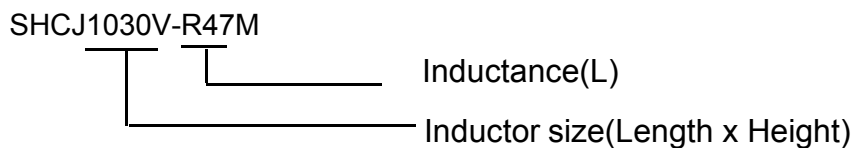


◆ Land Pattern(mm)



Type:SHCJ1030V
◆ Specification

Suntek Part Number	System code	Inductance L0 (μH) $\pm 20\%$ @ 0 A	I rms (A)Max.	I sat (A)Max.	DCR(m Ω) typ.@25 $^{\circ}\text{C}$	DCR(m Ω) Max.@26 $^{\circ}\text{C}$
SHCJ1030V-R15M		0.15	36.5	60.0	0.80	0.98
SHCJ1030V-R22M		0.22	31.5	57.5	1.10	1.32
SHCJ1030V-R33M		0.33	28.0	50.5	1.55	1.68
SHCJ1030V-R47M		0.47	23.4	42.0	2.22	2.40
SHCJ1030V-R56M		0.56	21.5	39.0	2.15	2.82
SHCJ1030V-R68M		0.68	20.0	36.0	2.60	3.32
SHCJ1030V-R82M		0.82	19.5	35.5	3.10	3.44
SHCJ1030V-1R0M		1.00	18.5	34.0	3.20	3.74
SHCJ1030V-1R5M		1.50	15.0	27.0	4.55	5.84
SHCJ1030V-2R2M		2.20	12.0	21.5	7.85	9.09
SHCJ1030V-3R3M		3.30	9.0	16.5	11.5	15.5
SHCJ1030V-4R7M		4.70	7.5	13.5	16.5	23.5

※Description of Part Name

Note:

1. Test frequency : 100KHz / 1.0V
2. All test data referenced to 20 $^{\circ}\text{C}$ ambient.
3. Testing Instrument : L: HP4284A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately $\Delta T=40^{\circ}\text{C}$ without core loss..
5. Saturation Current (I_{sat}) will cause L0 to drop approximately 20% typical.
6. The part temperature (ambient + temp rise) should not exceed 125 $^{\circ}\text{C}$ under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application