

# SURFACE MOUNT HIGH CURRENT POWER INDUCTOR

Wirewound Type, SIS1682 Series

Closed Magnetic Path



High current handling capacities.



Custom inductance value or tolerance is available



RoHS compliant



ELECTRICAL SPECIFICATION @ 25°C									
Part Number	Inductance @0Adc ( H)	Inductance @Irated ( H)	Inductance Tolerance (%)	Irated (Adc)	DCR (m ) Max	Saturation Current <sup>2</sup> (A)		Heating Current	Marking
						@25°C	@100°C	(A)	(XXXY)
SIS1682K-1R2F	1.2	1.2	±10	15.4	2.0	29	24.6	15.4	K1R2
SIS1682K-1R8F	1.8	1.8	±10	14.2	3.0	24.3	19	14.2	K1R8
SIS1682K-2R6F	2.6	2.5	±10	11.4	4.2	20.6	17.6	11.4	K2R6
SIS1682K-4R6F	4.6	4.5	±10	11.2	6.8	15	13	11.2	K4R6
SIS1682K-5R7F	5.7	5.6	±10	10.4	8.5	13.6	11.6	10.4	K5R7
SIS1682K-7R2F	7.2	7.1	±10	8.6	10.0	12.6	10.6	8.6	K7R2
SIS1682K-120F	12.2	12.0	±10	7.6	16.0	9	8	7.6	K120
SIS1682K-180F	18.7	18.3	±10	6.4	25.5	7.6	6.6	6.4	K180
SIS1682K-230F	23.1	22.6	±10	5.3	35.5	6.8	6	5.3	K230
SIS1682K-400F	40.7	39.9	±10	4.0	58.5	5	4.6	4	K400
SIS1682K-560F	56.5	55.4	±10	3.4	82.5	4.3	3.8	3.4	K560

## Notes:

1. Ordering Information: SIS1682a - bbbFc.

= Product Type. SIS1682

= Tolerance of Inductance (K = ±10%). а

= Inductance value in uH (i.e. 1R2 = 1.2uH; 120=12uH). bbb

= Internal Control Code. F

Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

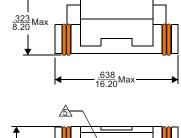
- 2. Inductance is tested at 100kHz.
- 3. The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- 4. The saturation current is the current which causes the inductance to drop by 10% typical.
- 5. The heating current is the dc current which causes the temperature of the part to increase by approximately 45°C.
- 6. Operating temperature range: -40°C to +125°C.
- 7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

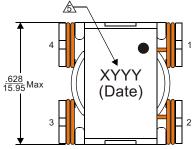


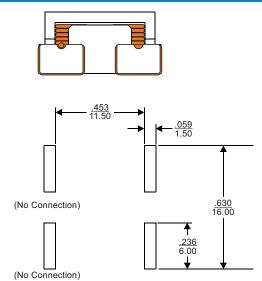
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Recommended Pad Layout

#### Notes:

- 8. Coplanarity:  $\frac{.004}{0.10}$  maximum.
- 9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- 10. Unless otherwise specified, all tolerances are  $\pm \frac{0.10}{0.25}$ .

Weight (in gram) : 4.25 typ.

Tape & Reel : 250 / reel

#### **SCHEMATIC PACKAGING** USER DIRECTION OF UNREELING 8.40 1.75 0.50 2.00 14.20 50 16.20 4 00 Ф 0 10.00 9.00 16.40

## FOR MORE INFORMATION, PLEASE CONTACT

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