


产 品 承 认 书

本司料号 (PART NO.)	ZGC0705D1
客户料号 (PART NO.)	
日期 (ISSUE DATE)	2021.06.1

工程 (ENGINEERING)	品质 (QUALITY)	盖章确认 (SEALED)
吴工	Steven	

客户确认

<input type="checkbox"/> 合格 (conforming) <input type="checkbox"/> 不合格 (nonconforming) 不合格原因:

客户签署及盖章

承认 (REPORTED BY)	盖章确认 (SEALED)

High Current Inductor



ZGC Series

A typical type of high current inductor with precision Rdc.



FEATURES

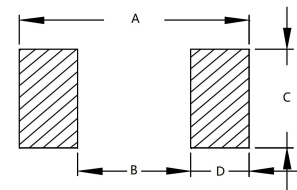
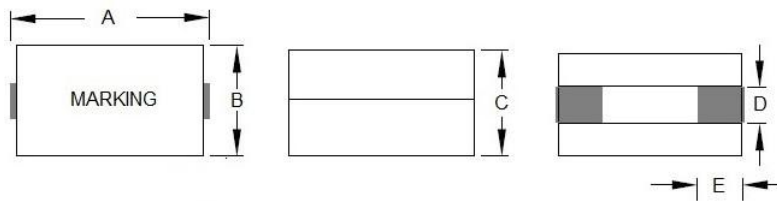
- High current and precision Rdc
- Ferrite core
- RoHS, Halogen free and REACH compliance

APPLICATION

- Server, workstation and storage systems
- Desktop and notebook
- Graphics cards and battery power systems
- Multi-phase and Vcore regulators
- Voltage Regulator Modules (VRMs)
- Point-of-Load modules
- DCR Sensing circuits

ENVIRONMENTAL DATA

- Storage temperature range: -40°C to +125°C
- Operating temperature range: -40°C to +125°C (ambient + self-temperature rise)
- Reflow soldering temperature: J-STD-020D compliance
- MSL level 1



Dimension (Unit:mm):

Recommended Land Pattern (Unit:mm):

SERIES	A ±0.3	B ±0.3	C Max	D ±0.2	E ±0.2
ZGC0705D1	6.7	6.8	5.0	2.5	1.6
ZGC0705D2	6.7	6.8	5.0	2.5	1.6
ZGC0708	6.7	8.3	7.2	2.1	1.5
ZGC0807	7.3	7.2	7.0	1.55	2.0
ZGC0906	9.7	6.2	8.0	2.2	2.3
ZGC1005	10.5	6.8	5.0	2.5	1.6
ZGC1007	10.5	7.8	7.6	2.3	2.6
ZGC1008	10.5	7.8	8.0	2.2	2.3
ZGC1107D1	10.7	7.0	7.5	2.0	2.5
ZGC1107D2	10.7	7.0	7.5	2.0	2.5
ZGC1108	10.7	7.7	7.5	2.1	2.0
ZGC1109	10.9	11.0	9.0	2.0	2.5
ZGC1108	11.0	7.3	8.8	2.2	1.8
ZGC1208	11.8	7.8	8.0	2.1	2.1
ZGC1308	13.1	12.5	8.0	5.1	2.6
ZGC1505	14.7	6.8	5.0	2.8	2.0
ZGC1608	16.8	8.3	4.0	3.0	2.3

A ref	B ref	C ref	D ref
7.6	2.4	3.1	2.4
7.6	2.4	3.1	2.4
7.6	3.2	2.7	2.2
8.0	2.6	2.2	2.7
10.4	4.0	3.0	3.2
11.2	6.4	3.1	2.4
11.2	4.4	3.0	3.4
11.2	4.8	3.0	3.2
11.4	4.8	2.7	3.3
11.4	4.8	2.7	3.3
11.4	6.0	2.7	2.7
11.6	5.0	2.7	3.3
11.8	6.6	3.0	2.6
12.6	6.6	2.7	3.0
14.0	7.0	7.5	3.5
15.6	10.2	4.0	2.7
17.8	11.0	4.5	3.4

■ 0705D1 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A		Irms/A
			Δ L-20%(typ)		Δ T+40 $^{\circ}$ C (typ)
	\pm 10%	\pm 10%	T _{amb} =25 $^{\circ}$ C	T _{amb} =125 $^{\circ}$ C	T _{amb} =25 $^{\circ}$ C
ZGC0705D1-R10M-□□□□	0.10	0.25	44	34	43
ZGC0705D1-R12M-□□□□	0.12	0.25	37	30	43
ZGC0705D1-R15M-□□□□	0.15	0.25	30	24	43
ZGC0705D1-R18M-□□□□	0.18	0.25	25	20	43
ZGC0705D1-R22M-□□□□	0.22	0.25	20	16	43

■ 0705D2 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A		Irms/A
			Δ L-20%(typ)		Δ T+40 $^{\circ}$ C (typ)
	\pm 10%	\pm 10%	T _{amb} =25 $^{\circ}$ C	T _{amb} =125 $^{\circ}$ C	T _{amb} =25 $^{\circ}$ C
ZGC0705D2-R10M-□□□□	0.10	0.32	44	34	38
ZGC0705D2-R12M-□□□□	0.12	0.32	37	30	38
ZGC0705D2-R15M-□□□□	0.15	0.32	30	24	38
ZGC0705D2-R18M-□□□□	0.18	0.32	25	20	38
ZGC0705D2-R22M-□□□□	0.22	0.32	20	16	38

■ 0708 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A		Irms/A
			Δ L-20%(typ)		Δ T+40 $^{\circ}$ C (typ)
	\pm 10%	\pm 10%	T _{amb} =25 $^{\circ}$ C	T _{amb} =125 $^{\circ}$ C	T _{amb} =25 $^{\circ}$ C
ZGC0708-R10M-□□□□	0.10	0.35	68	54	44
ZGC0708-R12M-□□□□	0.12	0.35	59	47	44
ZGC0708-R15M-□□□□	0.15	0.35	47	37	44
ZGC0708-R20M-□□□□	0.20	0.35	36	27	44

■ 0807 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A		Irms/A
			Δ L-20%(typ)		Δ T+40 $^{\circ}$ C (typ)
	\pm 10%	\pm 10%	T _{amb} =25 $^{\circ}$ C	T _{amb} =125 $^{\circ}$ C	T _{amb} =25 $^{\circ}$ C
ZGC0807-R10M-□□□□	0.10	0.50	77	55	45
ZGC0807-R12M-□□□□	0.12	0.50	66	48	45
ZGC0807-R18M-□□□□	0.18	0.50	42	32	45
ZGC0807-R22M-□□□□	0.22	0.50	35	25	45

■ 0906 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A Δ L-20%(typ)		Irms/A Δ T+40 $^{\circ}$ C(typ)
			$T_{amb}=25^{\circ}$ C	$T_{amb}=125^{\circ}$ C	$T_{amb}=25^{\circ}$ C
ZGC0906-R10M-□□□□	0.10	0.29	94	81	51
ZGC0906-R12M-□□□□	0.12	0.29	80	68	51
ZGC0906-R15M-□□□□	0.15	0.29	65	55	51
ZGC0906-R18M-□□□□	0.18	0.29	55	45	51
ZGC0906-R22M-□□□□	0.22	0.29	44	37	51
ZGC0906-R30M-□□□□	0.30	0.29	32	27	51

■ 1005 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A Δ L-20%(typ)		Irms/A Δ T+40 $^{\circ}$ C(typ)
			$T_{amb}=25^{\circ}$ C	$T_{amb}=125^{\circ}$ C	$T_{amb}=25^{\circ}$ C
ZGC1005-R10M-□□□□	0.10	0.39	73	57	53
ZGC1005-R12M-□□□□	0.12	0.39	60	48	53
ZGC1005-R15M-□□□□	0.15	0.39	47	37	53
ZGC1005-R22M-□□□□	0.22	0.39	33	26	53

■ 1007 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A Δ L-20%(typ)		Irms/A Δ T+40 $^{\circ}$ C(typ)
			$T_{amb}=25^{\circ}$ C	$T_{amb}=125^{\circ}$ C	$T_{amb}=25^{\circ}$ C
ZGC1007-R12M-□□□□	0.12	0.29	94	86	61
ZGC1007-R15M-□□□□	0.15	0.29	76	70	61
ZGC1007-R17M-□□□□	0.17	0.29	66	60	61
ZGC1007-R22M-□□□□	0.22	0.29	50	43	61
ZGC1007-R27M-□□□□	0.27	0.29	40	34	61
ZGC1007-R30M-□□□□	0.30	0.29	35	30	61
ZGC1007-R50M-□□□□	0.50	0.29	20	14	61

■ 1008 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A Δ L-20%(typ)		Irms/A Δ T+40 $^{\circ}$ C(typ)
			$T_{amb}=25^{\circ}$ C	$T_{amb}=125^{\circ}$ C	$T_{amb}=25^{\circ}$ C
ZGC1008-R10M-□□□□	0.10	0.18	100	80	74
ZGC1008-R12M-□□□□	0.12	0.18	100	80	74
ZGC1008-R15M-□□□□	0.15	0.18	85	60	74
ZGC1008-R18M-□□□□	0.18	0.18	70	50	74

ZGC1008-R22M-□□□□	0.22	0.18	58	42	74
ZGC1008-R27M-□□□□	0.27	0.18	44	32	74
ZGC1008-R30M-□□□□	0.30	0.18	36	26	74

■ 1107D1 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A ΔL -20%(typ)		Irms/A ΔT +40°C(typ)
			$T_{amb}=25^{\circ}C$	$T_{amb}=125^{\circ}C$	$T_{amb}=25^{\circ}C$
	$\pm 10\%$	$\pm 8\%$			
ZGC1107D1-R12M-□□□□	0.12	0.29	90	72	55
ZGC1107D1-R15M-□□□□	0.15	0.29	70	56	55
ZGC1107D1-R23M-□□□□	0.23	0.29	45	36	55
ZGC1107D1-R30M-□□□□	0.30	0.29	35	28	55

■ 1107D2 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A ΔL -20%(typ)		Irms/A ΔT +40°C(typ)
			$T_{amb}=25^{\circ}C$	$T_{amb}=125^{\circ}C$	$T_{amb}=25^{\circ}C$
	$\pm 10\%$	$\pm 7\%$			
ZGC1107D2-R12M-□□□□	0.12	0.47	90	72	42
ZGC1107D2-R15M-□□□□	0.15	0.47	70	56	42
ZGC1107D2-R23M-□□□□	0.23	0.47	45	36	42
ZGC1107D2-R30M-□□□□	0.30	0.47	35	28	42

■ 1108 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A ΔL -20%(typ)		Irms/A ΔT +40°C(typ)
			$T_{amb}=25^{\circ}C$	$T_{amb}=125^{\circ}C$	$T_{amb}=25^{\circ}C$
	$\pm 10\%$	$\pm 5\%$			
ZGC1108-R10M-□□□□	0.10	0.29	100	90	65
ZGC1108-R15M-□□□□	0.15	0.29	77	63	65
ZGC1108-R18M-□□□□	0.18	0.29	65	50	65
ZGC1108-R21M-□□□□	0.21	0.29	55	45	65

■ 1109 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A ΔL -30%(typ)		Irms/A ΔT +40°C(typ)
			$T_{amb}=25^{\circ}C$	$T_{amb}=125^{\circ}C$	$T_{amb}=25^{\circ}C$
	$\pm 10\%$	$\pm 10\%$			
ZGC1109-R20M-□□□□	0.20	0.42	69	50	35
ZGC1109-R33M-□□□□	0.33	0.42	44	33	35
ZGC1109-R47M-□□□□	0.47	0.42	27	20	35

■ 108 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A Δ L-20%(typ)		Irms/A Δ T+40°C (typ)
			$T_{amb}=25^{\circ}\text{C}$	$T_{amb}=125^{\circ}\text{C}$	$T_{amb}=25^{\circ}\text{C}$
ZGC108-R15M-□□□□	0.15	0.29	76	60	50
ZGC108-R18M-□□□□	0.18	0.29	65	50	50
ZGC108-R22M-□□□□	0.22	0.29	60	42	50
ZGC108-R27M-□□□□	0.27	0.29	42	30	50
ZGC108-R30M-□□□□	0.30	0.29	35	25	50
ZGC108-R36M-□□□□	0.36	0.29	32	22	50
ZGC108-R51M-□□□□	0.51	0.29	24	16	50
ZGC108-R56M-□□□□	0.56	0.29	18	12	50

■ 1208 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A Δ L-20%(typ)		Irms/A Δ T+40°C (typ)
			$T_{amb}=25^{\circ}\text{C}$	$T_{amb}=125^{\circ}\text{C}$	$T_{amb}=25^{\circ}\text{C}$
ZGC1208-R15M-□□□□	0.15	0.29	85	72	50
ZGC1208-R18M-□□□□	0.18	0.29	72	63	50
ZGC1208-R21M-□□□□	0.21	0.29	65	55	50

■ 1308 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A Δ L-20%(typ)		Irms/A Δ T+40°C (typ)
			$T_{amb}=25^{\circ}\text{C}$	$T_{amb}=125^{\circ}\text{C}$	$T_{amb}=25^{\circ}\text{C}$
ZGC1308-R21M-□□□□	0.21	0.32	80	68	57
ZGC1308-R32M-□□□□	0.32	0.32	52	40	57

■ 1505 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A Δ L-20%(typ)		Irms/A Δ T+40°C (typ)
			$T_{amb}=25^{\circ}\text{C}$	$T_{amb}=125^{\circ}\text{C}$	$T_{amb}=25^{\circ}\text{C}$
ZGC1505-R10M-□□□□	0.10	0.47	100	90	53
ZGC1505-R12M-□□□□	0.12	0.47	87	75	53
ZGC1505-R15M-□□□□	0.15	0.47	72	60	53
ZGC1505-R30M-□□□□	0.30	0.47	35	26	53

■ 1608 SERIES

Part Number	Inductance/ μ H	Rdc/mOhms	Isat/A		Irms/A
			Δ L-20%(typ)		Δ T+40°C (typ)
	\pm 10%	\pm 10%	T _{amb} =25°C	T _{amb} =125°C	T _{amb} =25°C
ZGC1608-R21M-□□□□	0.21	0.30	30	25	40

ZGC1608-R21M is a two stage saturation type for better efficiency and resist surge current.

- Inductance is measured with a LCR meter E4980AL (Agilent technologies) or equivalent at 100KHz, 1Vrms, 0Adc, 25°C.
- DC resistance is measured with 16502 miliohmeter (Refer to ambient temperature 25°C).
- Inductance decrease current is measured with 3302 automatic component analyzer and 1320 bias current source (Chroma technologies).
- IRMS: The current will cause self-temperature rise approximately 40°C.
- ISAT: The current will cause L₀ to drop approximately 20% or 30% depend on type.

APPLICATION NOTES:

- Shelf storing temperature -5°C~+40°C, Humidity 20% to 70%RH, keep away from chemical, dust, acid gas like sulfide & chloride gas and avoid expose direct to sunlight.

NOTICES:

- Product characteristics and tolerance can be adjusted per request. Others size and inductance is available for inquiry. Specifications are subject to change without notice. Please contact our sale for latest information.
- These products are not designed for use in applications where any failure or malfunction may resulted in personal injury, death or severe property or environmental damage such as medical, military, aircraft, space or life support equipment.