




# 产 品 承 认 书

本司料号 (PART NO.)	<b>ZGC0505DZ</b>
客户料号 (PART NO.)	
日期 (ISSUE DATE)	<b>2021.06.1</b>

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:
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客户签署及盖章

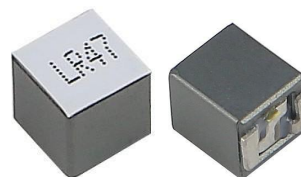
承认 (REPORTED BY)	盖章确认 (SEALED)

# High Current Inductor



## ZGC Series

A new design for highest current in smallest size



### FEATURES

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

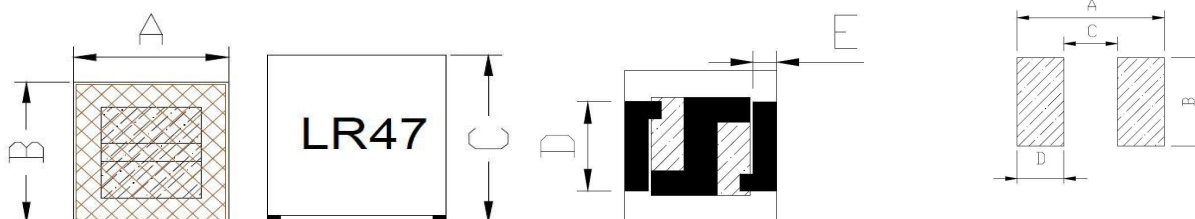
### APPLICATION

- 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

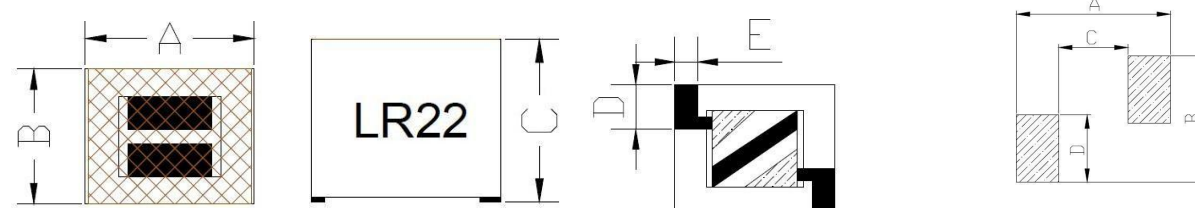
### ENVIRONMENTAL DATA

- 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

ZGC0505FE, ZGC0806EZ, ZGC0808EZ



ZGC0806FH



Dimension (Unit:mm):

SERIES	A ±0.3	B ±0.3	C max	D ±0.3	E ±0.3
ZGC0505DZ	5.3	5.3	4.0	2.8	1.0
ZGC0505FE	5.3	5.3	6.8	2.8	1.0
ZGC0806CE	8.1	6.5	3.5	2.9	1.5
ZGC0806EZ	8.1	6.5	5.0	2.9	1.5
ZGC0808EZ	8.5	8.0	5.0	4.5	1.4

Recommended Land Pattern (Unit:mm):

A ref	B ref	C ref	D ref
6.3	3.8	2.3	2.0
6.3	3.8	2.3	2.0
9.2	4.0	4.9	2.15
9.2	4.0	4.9	2.15
9.4	5.5	4.6	2.4

SERIES	A ±0.4	B ±0.4	C Max	D ±0.4	E ±0.4
ZGC0806FH	8.1	6.5	7.2	3.0	1.5

A ref	B ref	C ref	D ref
9.1	7.5	4.1	4.0

■ 0505DZ SERIES

Part Number	Inductance/ $\mu$ H	Rdc/mOhms	Isat/A		Irms/A
			$\Delta L-30\%$ (typ)		$\Delta T+40^{\circ}\text{C}$ (typ)
	$\pm 20\%$	$\pm 10\%$	$T_{\text{amb}}=25^{\circ}\text{C}$	$T_{\text{amb}}=125^{\circ}\text{C}$	$T_{\text{amb}}=25^{\circ}\text{C}$
ZGC0505DZ-R12M-□□□□	0.12	1.95	50	37.5	25
ZGC0505DZ-R15M-□□□□	0.15	1.95	40	30	25
ZGC0505DZ-R18M-□□□□	0.18	1.95	33	24	25
ZGC0505DZ-R22M-□□□□	0.22	1.95	27	20	25
ZGC0505DZ-R30M-□□□□	0.30	1.95	20	15	25

■ 0505FE SERIES

Part Number	Inductance/ $\mu$ H	Rdc/mOhms	Isat/A		Irms/A
			$\Delta L-30\%$ (typ)		$\Delta T+40^{\circ}\text{C}$ (typ)
	$\pm 20\%$	$\pm 10\%$	$T_{\text{amb}}=25^{\circ}\text{C}$	$T_{\text{amb}}=125^{\circ}\text{C}$	$T_{\text{amb}}=25^{\circ}\text{C}$
ZGC0505FE-R15M-□□□□	0.15	1.85	60	45	25
ZGC0505FE-R22M-□□□□	0.22	1.85	45	34	25
ZGC0505FE-R33M-□□□□	0.33	1.85	30	23	25
ZGC0505FE-R47M-□□□□	0.47	1.85	20	15	25

■ 0806CE SERIES

Part Number	Inductance/ $\mu$ H	Rdc/mOhms	Isat/A		Irms/A
			$\Delta L-30\%$ (typ)		$\Delta T+40^{\circ}\text{C}$ (typ)
	$\pm 20\%$	$\pm 10\%$	$T_{\text{amb}}=25^{\circ}\text{C}$	$T_{\text{amb}}=125^{\circ}\text{C}$	$T_{\text{amb}}=25^{\circ}\text{C}$
ZGC0806CE-R15M-□□□□	0.15	1.90	53	40	30
ZGC0806CE-R22M-□□□□	0.22	1.90	36	27	30
ZGC0806CE-R30M-□□□□	0.30	1.90	26	19.5	30
ZGC0806CE-R47M-□□□□	0.47	1.90	17	12.5	30

■ 0806EZ SERIES

Part Number	Inductance/ $\mu$ H	Rdc/mOhms	Isat/A		Irms/A
			$\Delta L-30\%$ (typ)		$\Delta T+40^{\circ}\text{C}$ (typ)
	$\pm 20\%$	$\pm 10\%$	$T_{\text{amb}}=25^{\circ}\text{C}$	$T_{\text{amb}}=125^{\circ}\text{C}$	$T_{\text{amb}}=25^{\circ}\text{C}$
ZGC0806EZ-R15M-□□□□	0.15	1.15	60	45	30
ZGC0806EZ-R22M-□□□□	0.22	1.15	40	30	30
ZGC0806EZ-R30M-□□□□	0.30	1.15	30	22.5	30
ZGC0806EZ-R47M-□□□□	0.47	1.15	20	15	30

■ 0806FH SERIES

Part Number	Inductance/ $\mu$ H	Rdc/mOhms	Isat/A		Irms/A
			$\Delta L$ -30%(typ)		$\Delta T$ +40 $^{\circ}$ C(typ)
	$\pm 20\%$	$\pm 10\%$	$T_{amb}=25^{\circ}$ C	$T_{amb}=125^{\circ}$ C	$T_{amb}=25^{\circ}$ C
ZGC0806FH-R15M-□□□□	0.15	1.0	80	60	35
ZGC0806FH-R22M-□□□□	0.22	1.0	55	40	35
ZGC0806FH-R30M-□□□□	0.30	1.0	45	34	35
ZGC0806FH-R47M-□□□□	0.47	1.0	28	21	35
ZGC0806FH-R68M-□□□□	0.68	1.0	20	15	35
ZGC0806FH-1R0M-□□□□	1.0	1.0	10	7.5	35

■ 0808 SERIES

Part Number	Inductance/ $\mu$ H	Rdc/mOhms	Isat/A		Irms/A
			$\Delta L$ -30%(typ)		$\Delta T$ +40 $^{\circ}$ C(typ)
	$\pm 20\%$	$\pm 10\%$	$T_{amb}=25^{\circ}$ C	$T_{amb}=125^{\circ}$ C	$T_{amb}=25^{\circ}$ C
ZGC0808EZ-R15M-□□□□	0.15	0.86	70	53	35
ZGC0808EZ-R22M-□□□□	0.22	0.86	50	38	35
ZGC0808EZ-R33M-□□□□	0.33	0.86	35	26	35
ZGC0808EZ-R47M-□□□□	0.47	0.86	23	17	35
ZGC0808EZ-R56M-□□□□	0.56	0.86	18	14	35
ZGC0808EZ-R68M-□□□□	0.68	0.86	16	12	35
ZGC0808EZ-1R0M-□□□□	1.0	0.86	9.0	6.5	35

- Inductance is measured with a LCR meter E4980AL (Agilent technologies) or equivalent at 100KHz, 1Vrms, 0Adc, 25 $^{\circ}$ C.
- DC resistance is measured with 16502 miliohmeter (Reference ambient temperature 25 $^{\circ}$ 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 $^{\circ}$ C.
- ISAT: The current will cause  $L_0$  to drop approximately 30%.

**APPLICATION NOTES:**

- Shelf storing temperature -5 $^{\circ}$ C~+40 $^{\circ}$ 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.