

POWER BEAD INDUCTOR – EASI Series

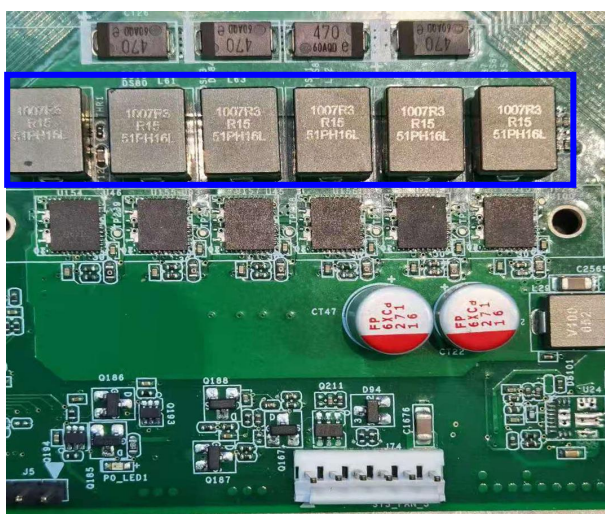
FEATURES

- * SMD power inductors
- * High saturation characteristic core for large saturation current and low loss
- * Closed magnetic circuit design reduces leakage flux
- * High precision and lower DCR
- * Operating temperature range: - 40 to +125° C (including self-temperature rise)
- * Halogen free, RoHS compliant



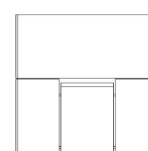
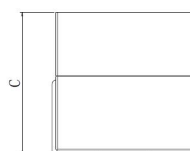
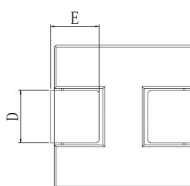
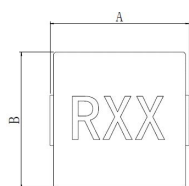
APPLICATIONS

- * Server, desktop computer, notebook
- * Graphics, memory
- * Industrial equipment, telecom base station
- * Multi-phase and Vcore regulators
- * Battery power systems

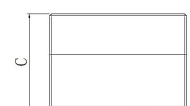
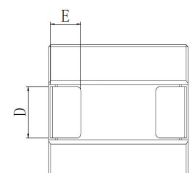
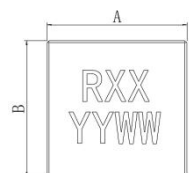


Product Shape

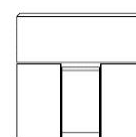
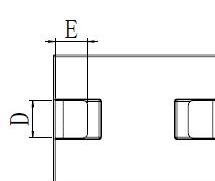
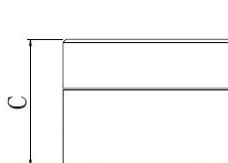
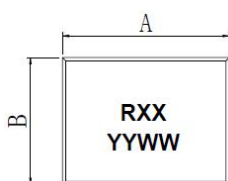
EASI040404R32



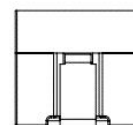
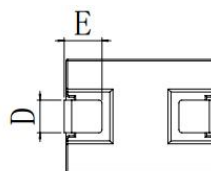
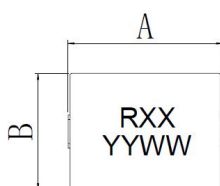
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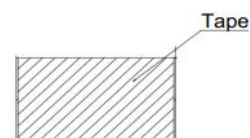
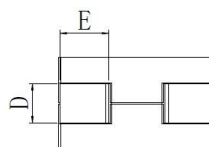
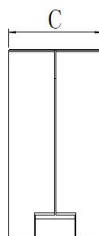
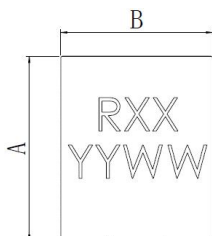
EASI100808AR18



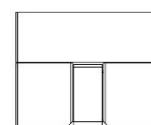
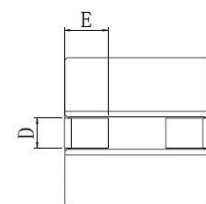
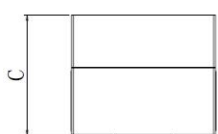
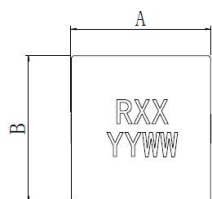
EASI100808R29



EASI100612R125



EASI121109R30

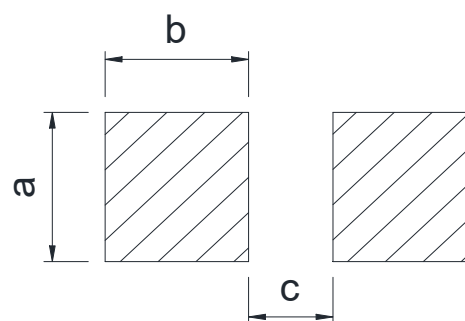


Product Dimensions (mm)

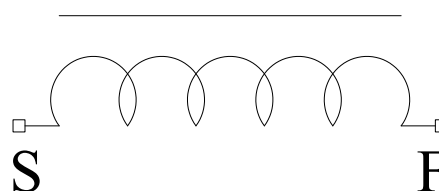
SERIES	A (max.)	B (max.)	C (max.)	D (ref.)	E (ref.)
EASI040404R32	4.0	4.0	4.0	1.40	1.30
EASI070705R32	7.0	6.8	5.0	2.50	1.50
EASI100808AR18	10.0	8.0	8.0	2.20	2.20
EASI100808R29	10.4	8.0	7.5	2.20	2.54
EASI100612R125	12.0	10.0	6.0	2.40	3.00
EASI121109R30	11.0	11.5	9.0	2.18	3.20

Land Pattern Dimensions (mm)

SERIES	a (typ.)	b (typ.)	c (typ.)
EASI040404R32	1.90	1.70	0.90
EASI070705R32	2.80	2.00	3.40
EASI100808AR18	3.00	3.56	4.06
EASI100808R29	2.50	3.00	4.70
EASI100612R125	3.00	3.55	3.90
EASI121109R30	2.70	3.95	4.20



Schematic:



ORDERING CODE

When ordering, please specify product code:

E A SI 100808 R29 - R15

① ② ③ ④ ⑤ ⑥

- ① Company Code
- ② Assembly Type
- ③ Product Structure
- ④ Product Dimensions (Ex. 100808=10x8x8mm(max.))
- ⑤ DCR Value (Ex. R29=0.29m Ω)
- ⑥ Inductance value (Ex. R15=150nH)

General Specifications

Test Frequency / Voltage.....100 KHz / 0.1V

Operating Temperature.....-40 °C to +125 °C (Temperature rise included)

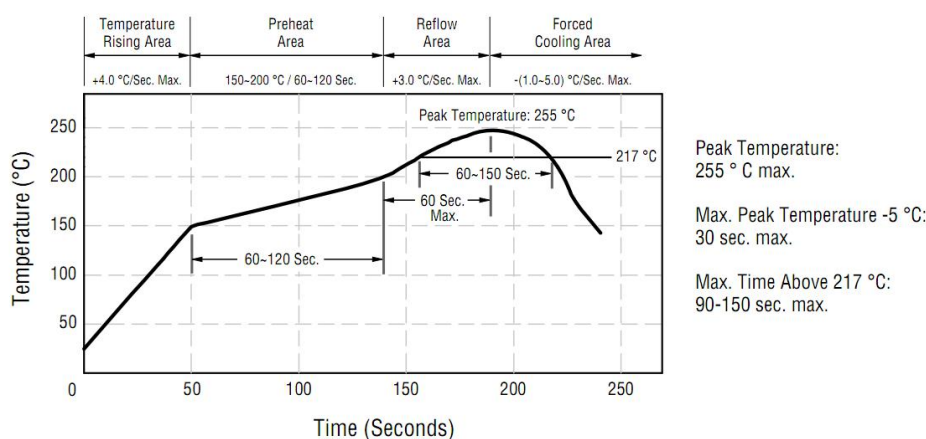
Storage Temperature.....-40 °C to +85 °C

Resistance to Solder Heat.....+255 °C for 10 sec.

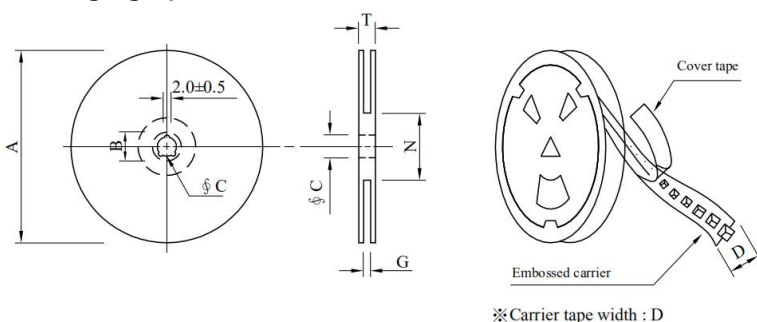
Temperature Rise.....40 °C typ. at rated Irms

Inductance Drop20 % typ. at Isat

Soldering Profile



Packaging Specifications



Style	A	B	C	D	Quantity (pcs/Reel)
EASI040404R32Series	330	21	13	12	1800
EASI070705R32Series	330	21	13	12	900
EASI100808AR18Series	330	21	13	12	700
EASI100808R29Series	330	21	13	12	700
EASI100612R125Series	330	21	13	12	300
EASI121109R30Series	330	21	13	12	300

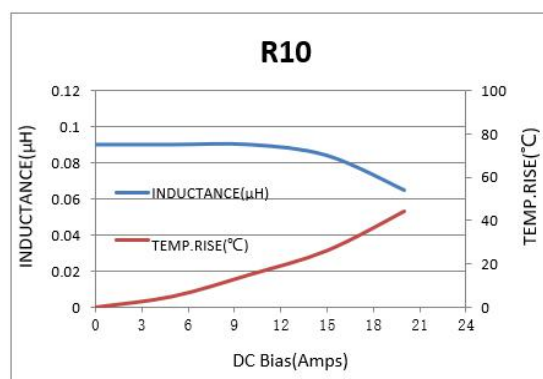
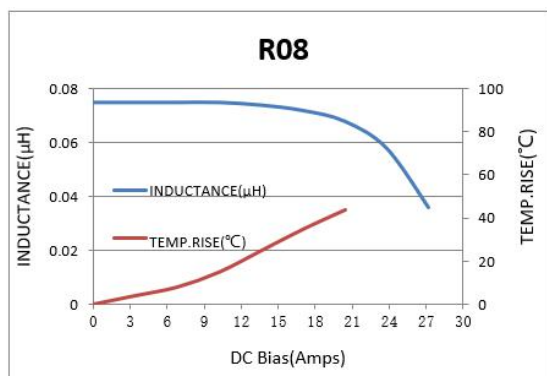
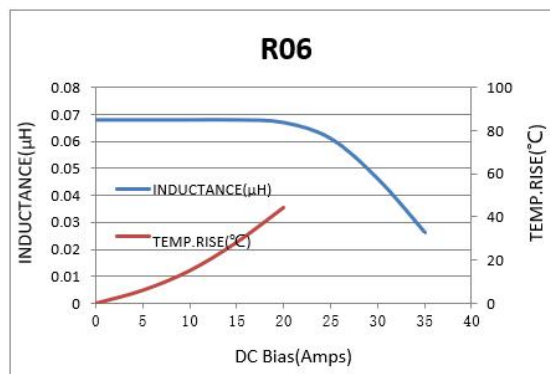
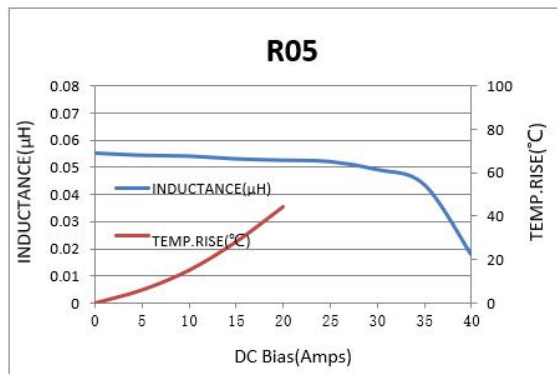
EASI040404R32Series Electrical Specifications @ 25 °C

Part No.	Inductance (nH)	Test Freq. Voltage	Tolerance (±%)	Isat (Amps)	Isat (Amps)	RDC (mΩ)Typical
EASI040404R32-R05	55	100KHz,0.1V	15	30	19	0.32
EASI040404R32-R06	65	100KHz,0.1V	15	26	19	0.32
EASI040404R32-R08	80	100KHz,0.1V	15	22	19	0.32
EASI040404R32-R10	100	100KHz,0.1V	15	17	19	0.32

Note:

1. Open Circuit Inductance (OCL) Test Parameters: 100 kHz, 0.1 Vrms,0.0 Adc, +25 °C
2. Irms: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.
3. Isat : Peak current for approximately 20% (R15 10%) rolloff @+25 °C (R15 10%)
4. Measurement Equipment: WK3260B+WK3265B

EAS1040404R32Series INDUCTANCE CHARACTERISTICS



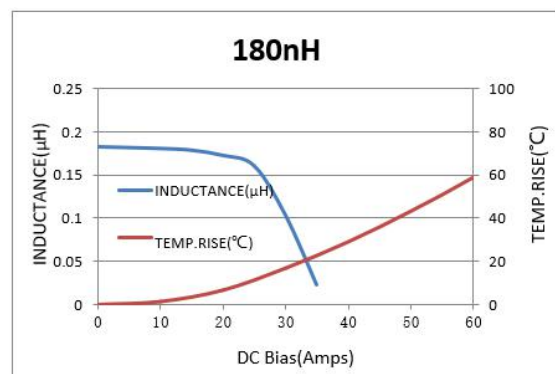
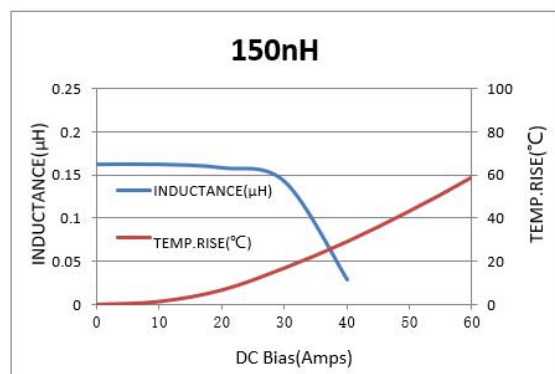
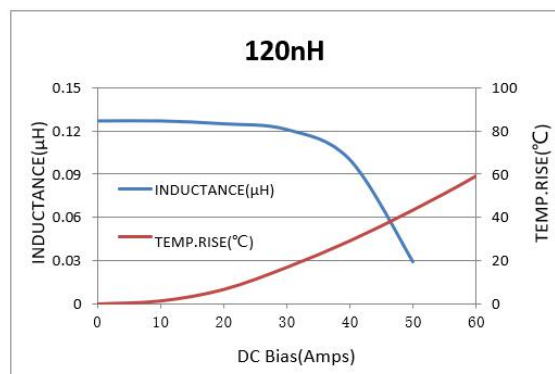
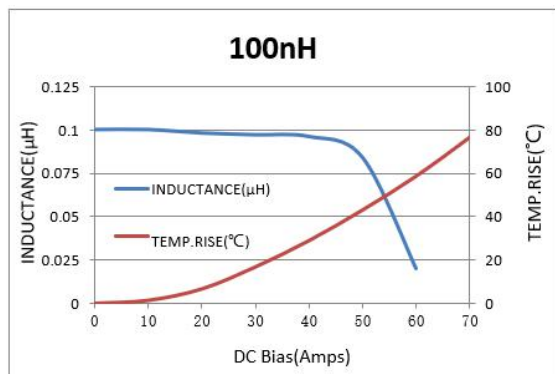
EASI070705R32Series Electrical Specifications @ 25 °C

Part No.	Inductance (nH)	Test Freq. Voltage	Tolerance (±%)	Isat (Amps)	Isat (Amps)	RDC (mΩ)Typical
EASI070705R32-R10	100	100KHz,0.1V	15	50	53	0.32
EASI070705R32-R12	120	100KHz,0.1V	15	50	40	0.32
EASI070705R32-R15	150	100KHz,0.1V	15	50	35	0.32
EASI070705R32-R18	180	100KHz,0.1V	15	50	28	0.32

Note:

1. Open Circuit Inductance (OCL) Test Parameters: 100 kHz, 0.1 Vrms,0.0 Adc, +25 °C
2. Irms: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.
3. Isat : Peak current for approximately 20% (R15 10%) rolloff @+25 °C (R15 10%)
4. Measurement Equipment: WK3260B+WK3265B

EASI070705R32Series INDUCTANCE CHARACTERISTICS



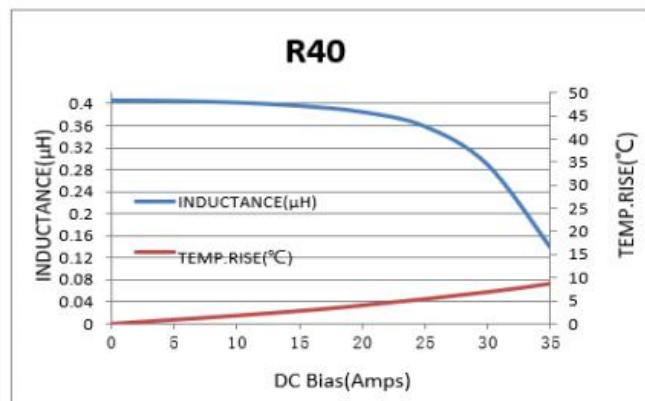
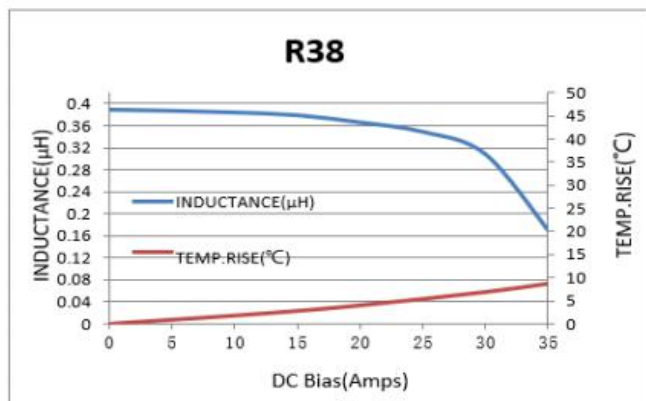
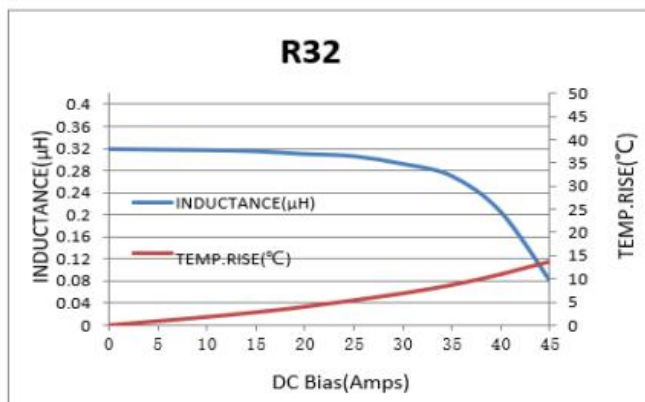
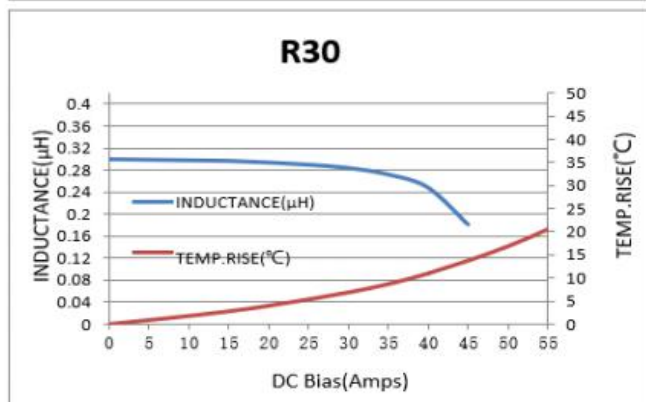
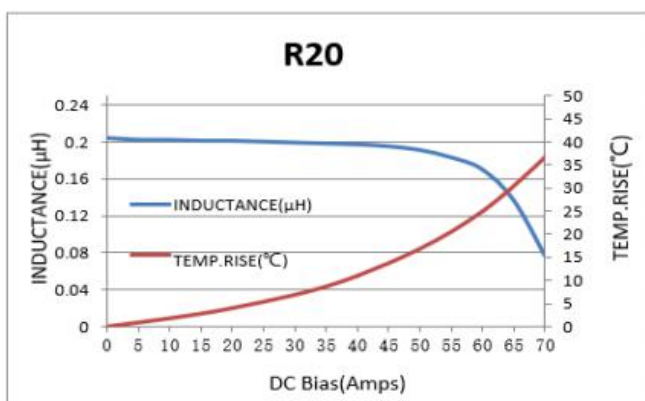
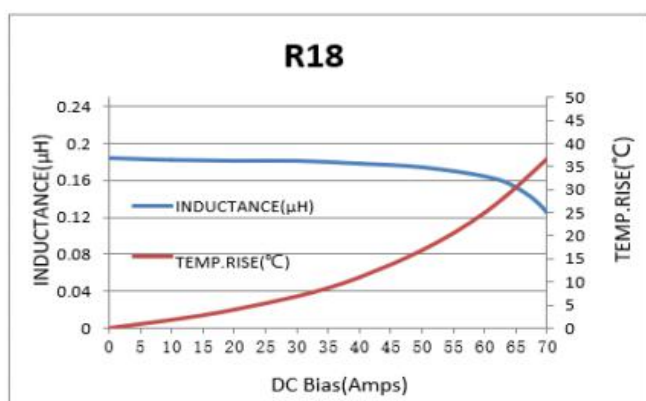
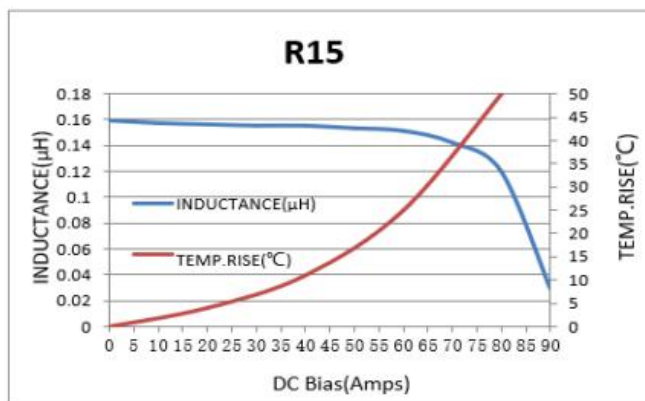
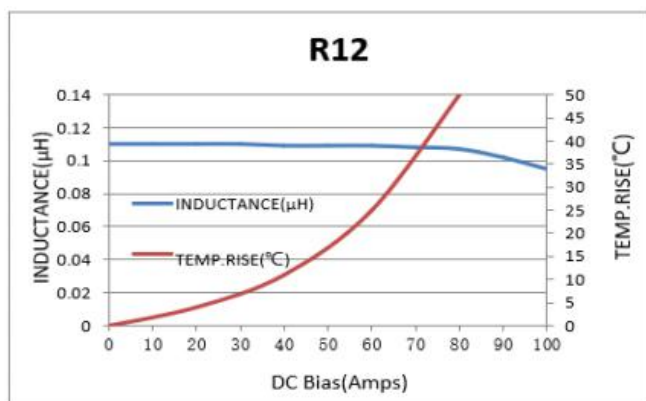
EASI100808AR18Series Electrical Specifications @ 25 °C

Part No.	Inductance (nH)	Test Freq. Voltage	Tolerance (±%)	Isat (Amps)	Isat (Amps)	RDC (mΩ)Typical
EASI100808AR18-R12	120	100KHz,0.1V	15	70	94	0.18
EASI100808AR18-R15	150	100KHz,0.1V	15	70	79	0.18
EASI100808AR18-R18	180	100KHz,0.1V	15	70	65	0.18
EASI100808AR18-R20	200	100KHz,0.1V	15	70	59	0.18
EASI100808AR18-R30	300	100KHz,0.1V	15	70	38	0.18
EASI100808AR18-R32	320	100KHz,0.1V	15	70	35	0.18
EASI100808AR18-R38	380	100KHz,0.1V	15	70	28	0.18
EASI100808AR18-R40	400	100KHz,0.1V	15	70	26	0.18

Note:

1. Open Circuit Inductance (OCL) Test Parameters: 100 kHz, 0.1 Vrms,0.0 Adc, +25 °C
2. Irms: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.
3. Isat : Peak current for approximately 20% (R15 10%) rolloff @+25 °C (R15 10%)
4. Measurement Equipment: WK3260B+WK3265B

EASI100808AR18Series INDUCTANCE CHARACTERISTICS



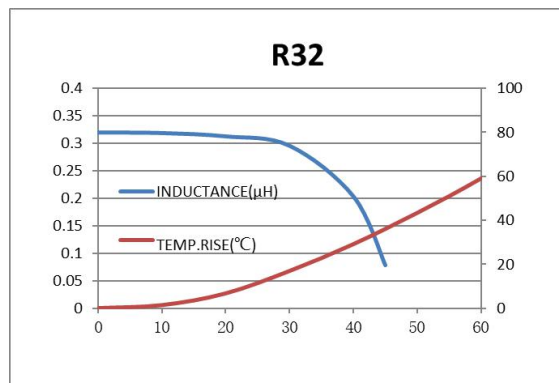
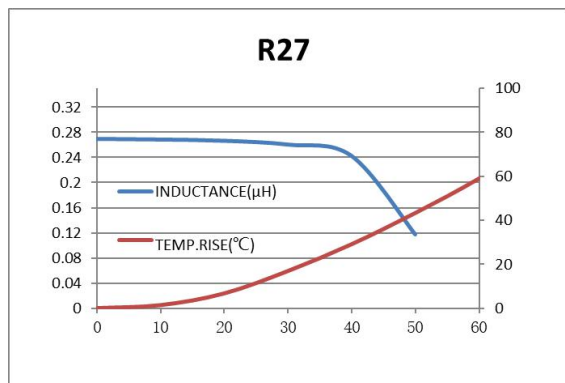
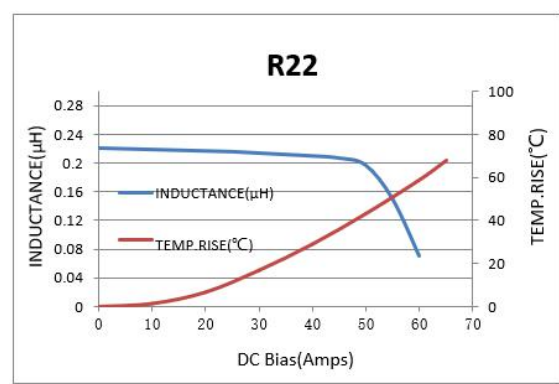
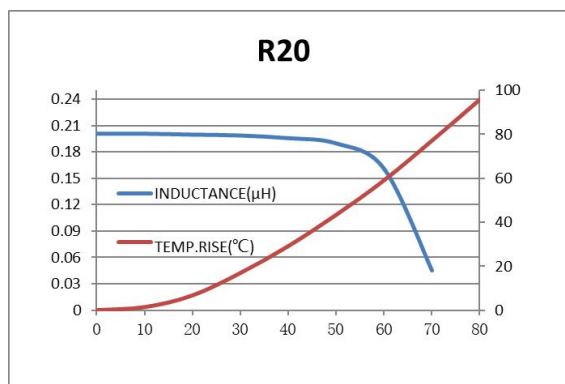
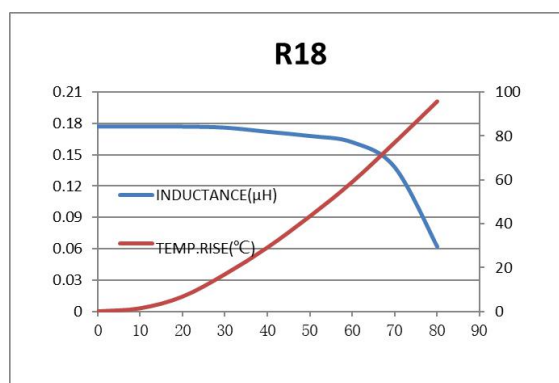
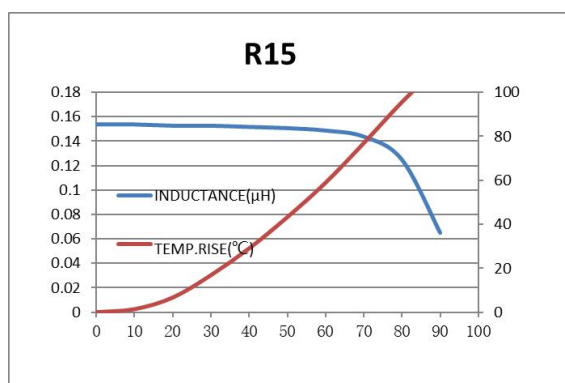
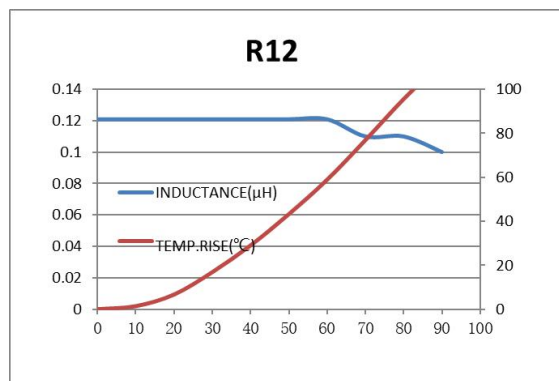
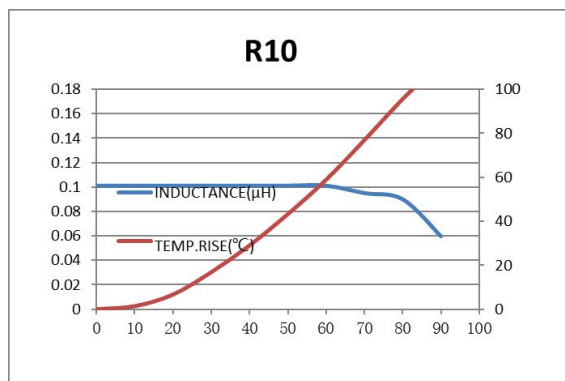
EASI100808R29Series Electrical Specifications @ 25 °C

Part No.	Inductance (nH)	Test Freq. Voltage	Tolerance (±%)	Isat (Amps)	Isat (Amps)	RDC (mΩ)Typical
EASI100808R29-R10	100	100KHz,0.1V	15	56	80	0.29
EASI100808R29-R12	120	100KHz,0.1V	15	56	80	0.29
EASI100808R29-R15	150	100KHz,0.1V	15	56	73	0.29
EASI100808R29-R18	180	100KHz,0.1V	15	56	65	0.29
EASI100808R29-R20	200	100KHz,0.1V	15	56	60	0.29
EASI100808R29-R22	220	100KHz,0.1V	15	56	52	0.29
EASI100808R29-R27	270	100KHz,0.1V	15	56	46	0.29
EASI100808R29-R32	320	100KHz,0.1V	15	56	35	0.29
EASI100808R29-R34	340	100KHz,0.1V	15	56	34	0.29
EASI100808R29-R37	370	100KHz,0.1V	15	56	30	0.29

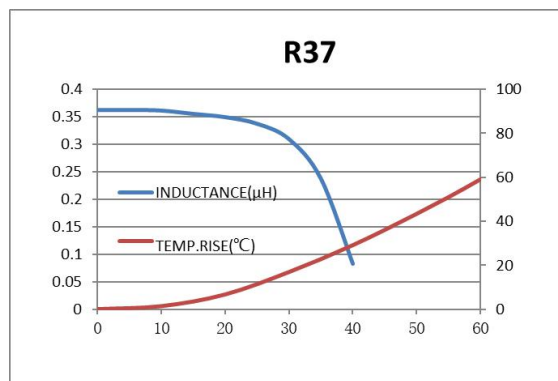
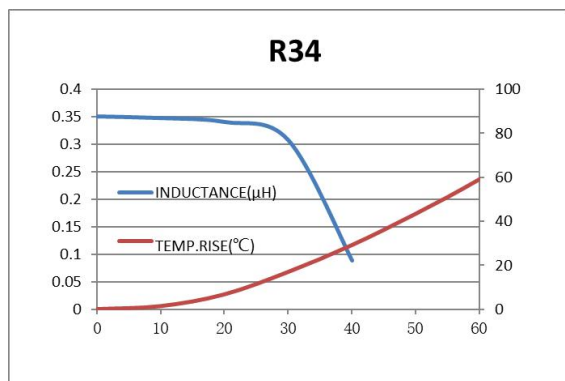
Note:

1. Open Circuit Inductance (OCL) Test Parameters: 100 kHz, 0.1 Vrms, 0.0 Adc, +25 °C
2. Irms: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.
3. Isat : Peak current for approximately 20% (R15 10%) rolloff @+25 °C (R15 10%)
4. Measurement Equipment: WK3260B+WK3265B

EASI100808R29Series INDUCTANCE CHARACTERISTICS



EAS1100808R29Series INDUCTANCE CHARACTERISTICS



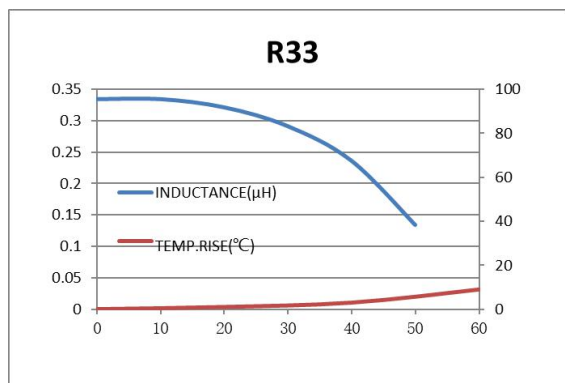
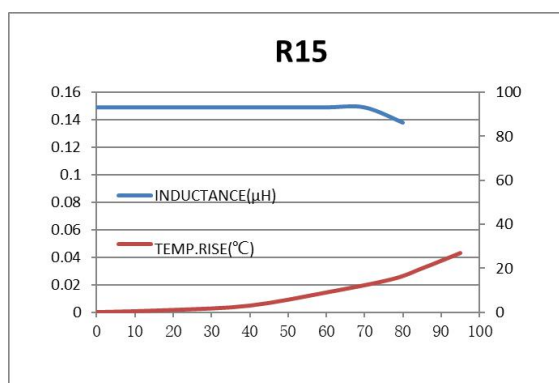
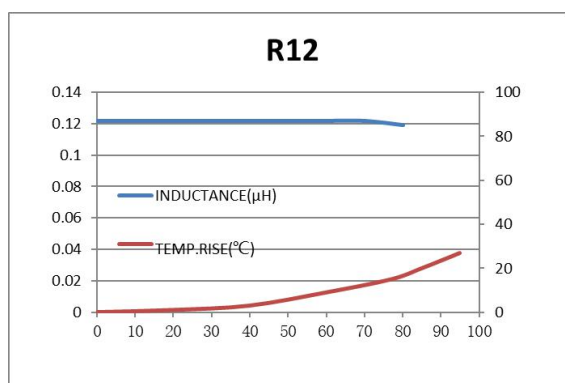
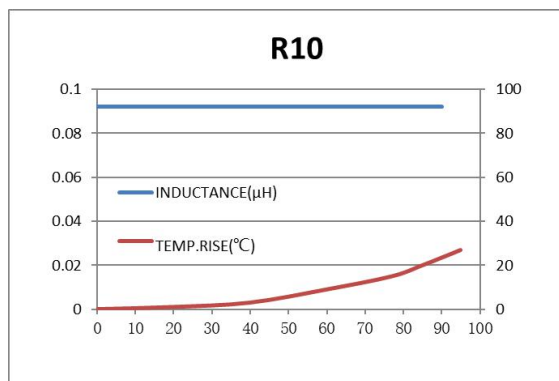
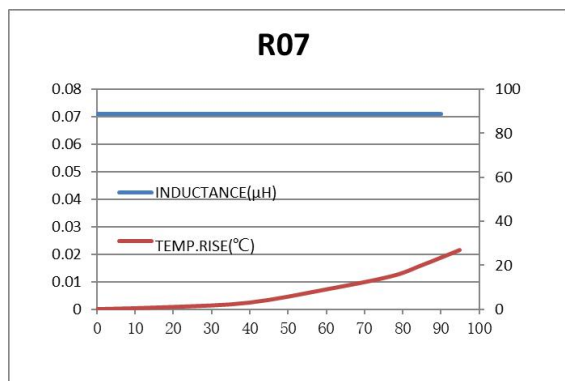
EASI100612R125Series Electrical Specifications @ 25 °C

Part No.	Inductance (nH)	Test Freq. Voltage	Tolerance (±%)	Isat (Amps)	Isat (Amps)	RDC (mΩ)Typical
EASI100612R125-R07	70	100KHz,0.1V	15	77	180	0.125
EASI100612R125-R10	100	100KHz,0.1V	15	77	125	0.125
EASI100612R125-R12	120	100KHz,0.1V	15	77	106	0.125
EASI100612R125-R15	150	100KHz,0.1V	15	77	83	0.125
EASI100612R125-R33	330	100KHz,0.1V	15	77	40	0.125

Note:

1. Open Circuit Inductance (OCL) Test Parameters: 100 kHz, 0.1 Vrms, 0.0 Adc, +25 °C
2. Irms: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.
3. Isat : Peak current for approximately 20% (R15 10%) rolloff @+25 °C (R15 10%)
4. Measurement Equipment: WK3260B+WK3265B

EASI100612R125Series INDUCTANCE CHARACTERISTICS



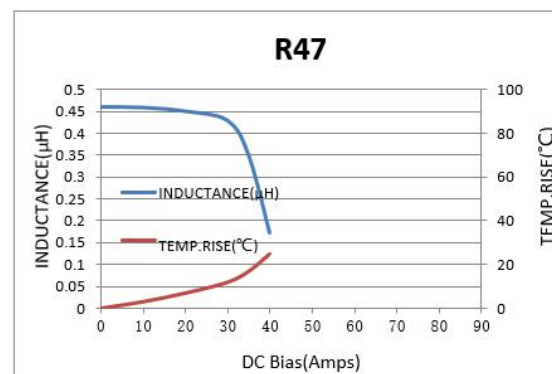
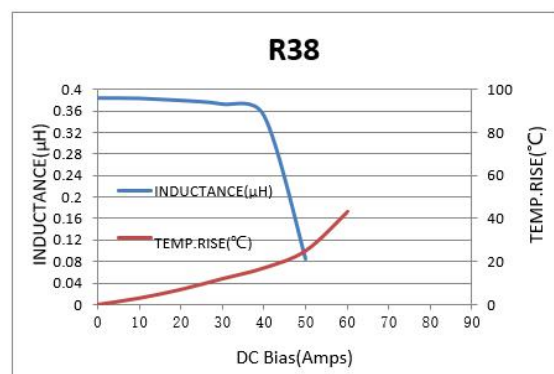
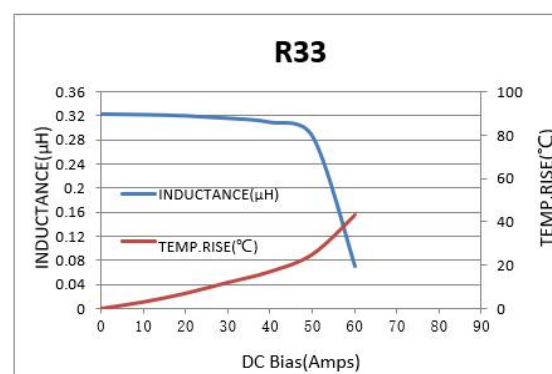
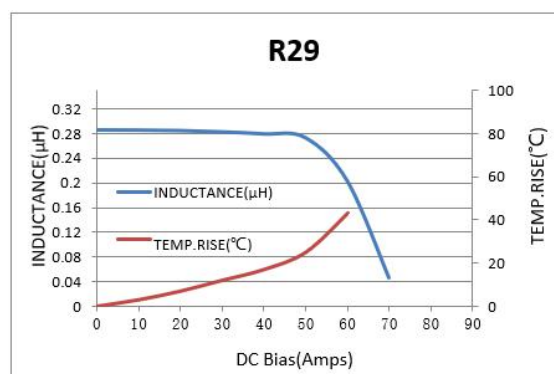
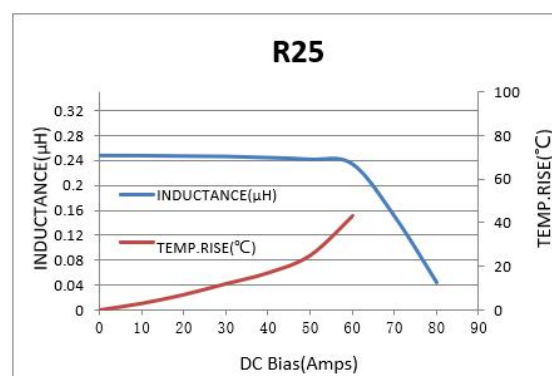
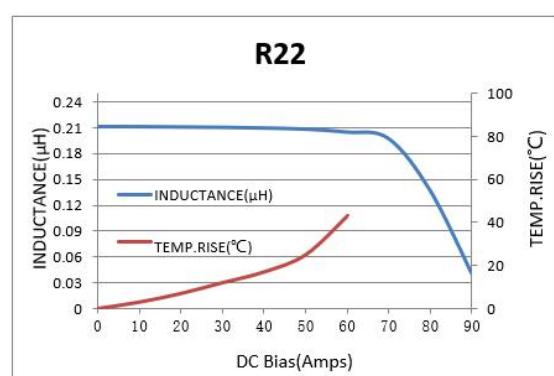
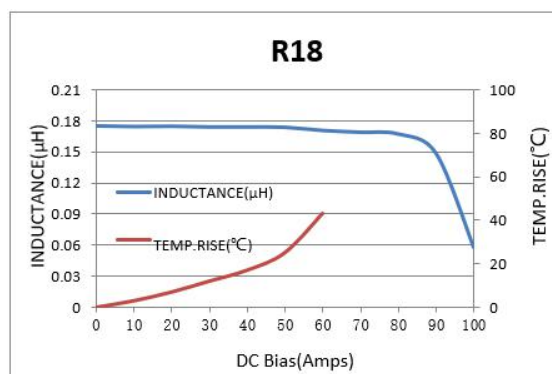
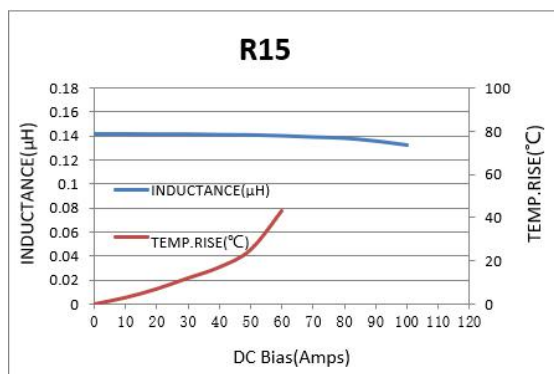
EASI121109R30Series Electrical Specifications @ 25 °C

Part No.	Inductance (nH)	Test Freq. Voltage	Tolerance (±%)	Isat (Amps)	Isat (Amps)	RDC (mΩ)Typical
EASI121109R30-R15	150	100KHz,0.1V	15	55	105	0.30
EASI121109R30-R18	180	100KHz,0.1V	15	55	90	0.30
EASI121109R30-R22	220	100KHz,0.1V	15	55	78	0.30
EASI121109R30-R25	250	100KHz,0.1V	15	55	68	0.30
EASI121109R30-R29	290	100KHz,0.1V	15	55	55	0.30
EASI121109R30-R33	330	100KHz,0.1V	15	55	54	0.30
EASI121109R30-R38	380	100KHz,0.1V	15	55	45	0.30
EASI121109R30-R47	470	100KHz,0.1V	15	55	38	0.30
EASI121109R30-R50	500	100KHz,0.1V	15	55	32	0.30

Note:

1. Open Circuit Inductance (OCL) Test Parameters: 100 kHz, 0.1 Vrms, 0.0 Adc, +25 °C
2. Irms: DC current for an approximate temperature rise of 40 °C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed +125 °C under worst case operating conditions verified in the end application.
3. Isat : Peak current for approximately 20% (R15 10%) rolloff @+25 °C (R15 10%)
4. Measurement Equipment: WK3260B+WK3265B

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