

Flat Wire Assembly Inductor-TRER Series

The Flat Wire Assembly Inductor is designed with a professional flat wire winding and precision assembly process. It has the advantages of compact structure, high power density, low high-frequency loss and strong anti-interference performance.



Features

- Low loss and small magnetostriction ensure low noise.
- Flat wire winding delivers ultra-low DCR.
- Superior temperature stability and high continuous current capability.

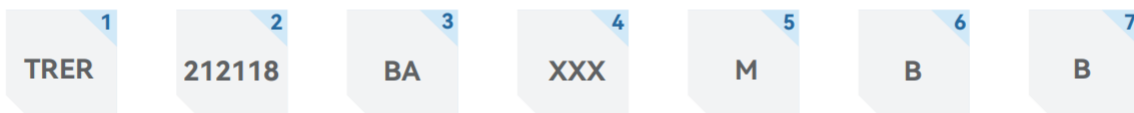
Applications

- Industrial control
- New energy
- DC-DC converters
- High current switching regulators

Operating Temp

- -40°C~+125°C

Product Identification



1	Product Symbol
TRER	SMD Power Inductor

2	External Dimensions(mm)
212118	20.5*20.5*17.5
212122	20.5*21.0*22.2
272522	26.5*25.0*22.2
272526	26.5*25.0*26.0
323022	32.2*30.0*22.2
323132	32.2*30.5*31.5
363536	36.0*34.2*35.7
423941	41.5*39.0*41.0
504651	50.0*46.0*51.0

3	Internal Code
BA	BASE&Alloy Powder

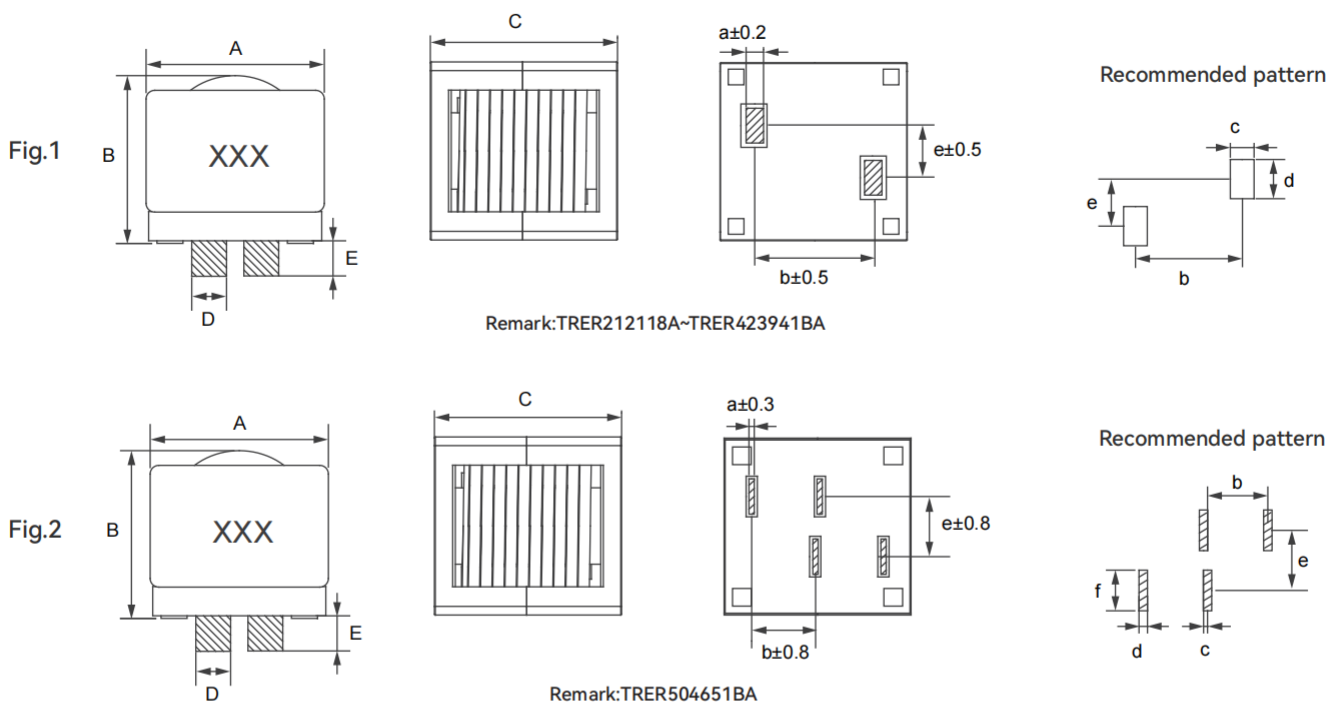
4	Nominal Inductance
1R0	1.0μH
100	10μH
101	100μH

5	Inductance Tolerance
M	±20%

6	Packing
B	Bulk

7	Internal Code
B	Special

Shape and Dimensions



Dimensions

Unit:mm

Series	A	B	C	D	E	a	b	c	d	e	f
TRER212118BA	20.5±0.5	20.5Max.	17.5Max.	4.0±0.2	3.5±1.0	See spec table	See spec table	See spec table	5.0	6.0	/
TRER212122BA	20.5±0.5	21.0Max.	22.2Max.	4.0±0.2	3.5±1.0	See spec table	See spec table	See spec table	5.0	6.0	/
TRER272522BA	26.5±0.5	25.0Max.	22.2Max.	4.5±0.2	3.5±1.0	See spec table	See spec table	See spec table	5.5	9.0	/
TRER272526BA	26.5±0.5	25.0Max.	26.0Max.	4.5±0.2	3.5±1.0	See spec table	See spec table	See spec table	5.5	9.0	/
TRER323022BA	32.2±0.5	30.0Max.	22.2Max.	6.5±0.2	4.0±1.0	See spec table	See spec table	See spec table	7.5	11.0	/
TRER323132BA	32.2±0.5	30.5Max.	31.5Max.	6.5±0.2	4.0±1.0	See spec table	See spec table	See spec table	7.5	11.0	/
TRER363536BA	36.0±0.5	34.2Max.	35.7Max.	8.0±0.3	4.0±1.0	See spec table	See spec table	See spec table	9.5	11.5	/
TRER423941BA	41.5±0.5	39.0Max.	41.0Max.	10.0±0.3	4.0±1.0	See spec table	See spec table	See spec table	11.5	13.5	/
TRER504651BA	50.0±0.8	46.0Max.	51.0Max.	10.0±0.5	5.0±1.0	See spec table	See spec table	See spec table	See spec table	17.0	11.5

Specification

TRER212118BA Series

Part Number	Inductance	Saturation Current	Heat Rating Current	DC Resistance		a(mm)	b(mm)	c(mm)
	L (μH)	Isat(A)	Irms(A)	DCR(mΩ)				
	±20 %	Typ.	Typ.	Max.	Typ.			
TRER212118BA3R3MBB	3.3	34.00	52.50	0.92	0.77	1.5	9.8	2.3
TRER212118BA4R7MBB	4.7	29.00	41.80	1.35	1.13	1.2	9.6	2.0
TRER212118BA7R6MBB	7.6	23.00	34.00	2.04	1.70	1.0	10.2	1.8
TRER212118BA100MBB	10	20.50	31.00	2.48	2.07	0.9	10.1	1.7
TRER212118BA160MBB	16	16.00	24.00	4.22	3.52	0.7	10.1	1.5
TRER212118BA220MBB	22	13.50	20.50	5.60	4.67	0.6	10.1	1.4

TRER212122BA Series

Part Number	Inductance	Saturation Current	Heat Rating Current	DC Resistance		a(mm)	b(mm)	c(mm)
	L (μH)	Isat(A)	Irms(A)	DCR(mΩ)				
	±20 %	Typ.	Typ.	Max.	Typ.			
TRER212122BA2R7MBB	2.7	41.00	60.00	0.72	0.60	2.0	13.5	3.0
TRER212122BA3R9MBB	3.9	35.00	54.00	0.88	0.73	1.8	13.9	2.8
TRER212122BA5R2MBB	5.2	31.00	48.00	1.12	0.93	1.6	13.9	2.6
TRER212122BA6R5MBB	6.5	27.50	42.00	1.51	1.26	1.4	13.7	2.4
TRER212122BA8R2MBB	8.2	24.50	38.50	1.73	1.44	1.3	14.0	2.3
TRER212122BA100MBB	10	22.00	35.00	2.11	1.76	1.2	14.5	2.2
TRER212122BA130MBB	13	19.00	29.00	2.96	2.47	1.0	14.3	2.0
TRER212122BA200MBB	20	15.50	24.00	4.46	3.72	0.8	14.5	1.8

TRER272522BA Series

Part Number	Inductance	Saturation Current	Heat Rating Current	DC Resistance		a(mm)	b(mm)	c(mm)
	L (μH)	Isat(A)	Irms(A)	DCR(mΩ)				
	±20 %	Typ.	Typ.	Max.	Typ.			
TRER272522BA2R2MBB	2.2	73.00	79.00	0.43	0.36	2.5	10.8	3.5
TRER272522BA3R6MBB	3.6	58.00	65.00	0.64	0.53	2.0	11	3.0
TRER272522BA5R5MBB	5.5	40.00	56.00	0.84	0.70	1.8	12.4	2.8
TRER272522BA7R5MBB	7.5	34.00	48.00	1.15	0.96	1.6	12.6	2.6
TRER272522BA100MBB	10	29.00	41.00	1.61	1.34	1.3	11.8	2.3
TRER272522BA120MBB	12	27.00	39.00	1.81	1.51	1.3	12.9	2.3
TRER272522BA150MBB	15	24.00	34.00	2.32	1.93	1.1	12.6	2.1
TRER272522BA220MBB	22	19.00	28.00	3.48	2.90	0.9	11.7	1.9

TRER272526BA Series

Part Number	Inductance	Saturation Current	Heat Rating Current	DC Resistance		a(mm)	b(mm)	c(mm)
	L (μH)	Isat(A)	Irms(A)	DCR(mΩ)				
	±20 %	Typ.	Typ.	Max.	Typ.			
TRER272526BA4R7MBB	4.7	45.00	60.00	0.64	0.53	2.5	16.2	3.5
TRER272526BA6R8MBB	6.8	38.00	56.00	0.90	0.75	2.0	15.5	3.0
TRER272526BA100MBB	10	31.00	44.00	1.48	1.23	1.6	16.2	2.6
TRER272526BA150MBB	15	25.00	36.00	2.20	1.84	1.3	15.8	2.3
TRER272526BA200MBB	20	22.00	33.00	2.62	2.18	1.2	15.8	2.2
TRER272526BA220MBB	22	21.00	30.00	2.99	2.49	1.1	16.2	2.1
TRER272526BA270MBB	27	19.00	28.00	3.56	2.97	1.0	16.2	2.0
TRER272526BA330MBB	33	17.00	25.00	4.66	3.88	0.9	15.8	1.9

TRER323022BA Series

Part Number	Inductance	Saturation Current	Heat Rating Current	DC Resistance		a(mm)	b(mm)	c(mm)
	L (μH)	Isat(A)	Irms(A)	DCR(mΩ)				
	±20 %	Typ.	Typ.	Max.	Typ.			
TRER323022BA6R2MBB	6.2	52.00	65.00	0.72	0.60	1.8	11.9	3.0
TRER323022BA180MBB	18	30.00	38.00	2.08	1.73	1.0	11.3	2.0
TRER323022BA360MBB	36	21.00	27.00	4.15	3.46	0.7	12.2	1.7
TRER323022BA470MBB	47	18.50	23.00	5.52	4.60	0.6	11.4	1.6

TRER323132BA Series

Part Number	Inductance	Saturation Current	Heat Rating Current	DC Resistance		a(mm)	b(mm)	c(mm)
	L (μH)	Isat(A)	Irms(A)	DCR(mΩ)				
	±20 %	Typ.	Typ.	Max.	Typ.			
TRER323132BA4R7MBB	4.7	55.00	84.00	0.47	0.42	2.7	18.0	3.9
TRER323132BA100MBB	10	39.00	55.00	1.06	0.88	1.8	18.8	2.8
TRER323132BA450MBB	45	17.50	30.00	3.73	3.11	1.0	20.5	2.0

TRER363536BA Series

Part Number	Inductance	Saturation Current	Heat Rating Current	DC Resistance		a(mm)	b(mm)	c(mm)
	L (μH)	Isat(A)	Irms(A)	DCR(mΩ)				
	±20 %	Typ.	Typ.	Max.	Typ.			
TRER363536BA4R7MBB	4.7	65.00	120.00	0.36	0.30	3.2	22.6	4.4
TRER363536BA6R8MBB	6.8	54.00	107.00	0.46	0.38	3.0	22.6	4.2
TRER363536BA8R6MBB	8.6	48.00	73.00	0.61	0.51	2.5	23.3	3.7
TRER363536BA110MBB	11	42.50	71.00	0.74	0.62	2.3	24.2	3.5
TRER363536BA160MBB	16	35.00	62.00	1.15	0.96	1.8	24.2	2.8
TRER363536BA270MBB	27	27.00	54.00	1.78	1.48	1.5	24.2	2.5
TRER363536BA560MBB	56	19.00	41.00	3.83	3.19	1.0	24.3	2.0
TRER363536BA950MBB	95	14.50	32.00	6.15	5.13	0.8	25.4	1.8
TRER363536BA111MBB	110	13.00	30.00	7.41	6.18	0.7	24.3	1.7

TRER423941BA Series

Part Number	Inductance	Saturation Current	Heat Rating Current	DC Resistance		a(mm)	b(mm)	c(mm)
	L (μH)	Isat(A)	Irms(A)	DCR(mΩ)				
	±20 %	Typ.	Typ.	Max.	Typ.			
TRER423941BA280MBB	28	32.00	70.00	1.57	1.31	1.6	28.5	2.6
TRER423941BA330MBB	33	29.00	52.00	1.88	1.56	1.4	28.8	2.4
TRER423941BA500MBB	50	24.00	48.00	2.79	2.32	1.2	28.5	2.2
TRER423941BA680MBB	68	21.00	43.00	3.82	3.18	1.0	29.0	2.0
TRER423941BA101MBB	100	17.00	35.00	5.82	4.85	0.8	29.0	1.8

TRER504651BA Series

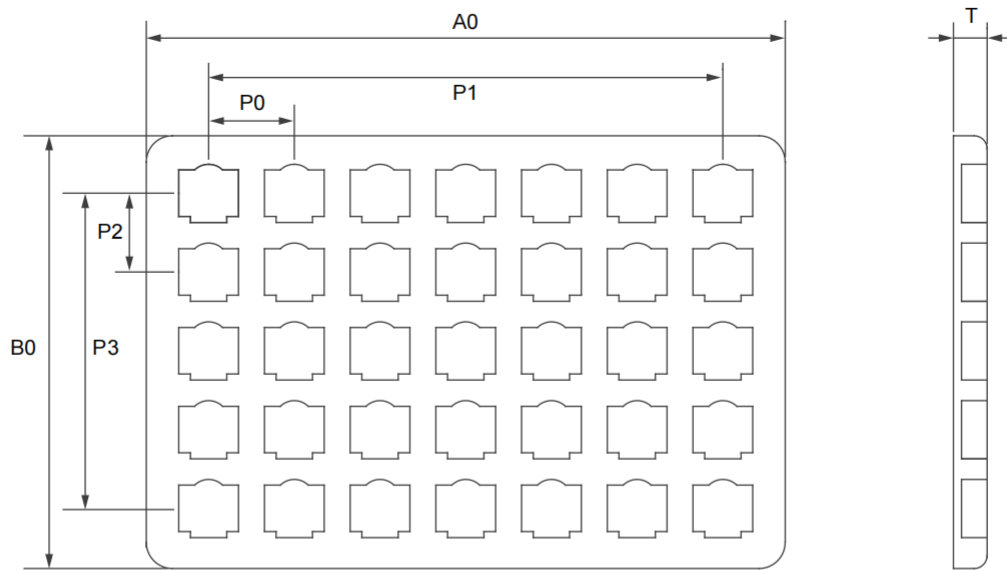
Part Number	Inductance	Saturation Current	Heat Rating Current	DC Resistance		a(mm)	b(mm)	c(mm)	d(mm)
	L (μH)	Isat(A)	Irms(A)	DCR(mΩ)					
	±20 %	Typ.	Typ.	Max.	Typ.				
TRER504651BA130MBB	13	62.00	114.00	1.22	1.02	1.6	16.8	1.4	2.6
TRER504651BA170MBB	17	56.00	105.00	1.52	1.27	1.4	17.1	1.1	2.4
TRER504651BA250MBB	25	47.00	100.00	2.14	1.79	1.2	17.8	0.9	2.2
TRER504651BA560MBB	56	31.00	67.00	4.87	4.06	0.8	17.7	0.6	1.8
TRER504651BA920MBB	92	24.00	51.00	8.35	6.96	0.6	17.7	0.5	1.6

Notes

- All data is tested on 25 ambient temperature.
- Inductance measure condition at 100kHz,0.1V.
- Isat: the actual value of DC current when the Inductance decrease 30% of its initial Value.
- Irms: The actual value of DC current when the Temperature rise is ΔT50 (Ta=25).

Packaging Information

Bulk Dimensions



Dimensions

Series	A0	B0	P0	P1	P2	P3	T	Packaging Unit (Pcs)
TRER212118BA	245	195	35.5	177.5	33	132	22	30
TRER212122BA	245	195	44.3	177.5	33	132	26	25
TRER272522BA	245	195	44	176	40	120	26.5	20
TRER272526BA	245	195	51.7	155.1	40	120	28	16
TRER323022BA	245	195	51.5	155	56	112	26	12
TRER323132BA	245	195	51.5	155	56	112	36	12
TRER363536BA	245	195	71	142	80	80	39	6
TRER423941BA	245	195	/	142	85	85	44	6
TRER504651BA	250	200	100	100	82	82	61	4