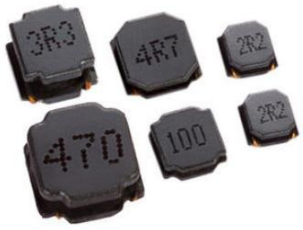
FEATURES

- Various high power inductors are superior to be high saturation
- Suitable for surface mounting equipment
- Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
- Takes up less PCB real estate and save more power
- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels
- Operating Temperature: -40℃~+125℃



APPLICATIONS

- Smart phone, smart TV, set top box, notebook
- Car navigation systems, telecomm basestations
- VR, AR, LED lighting
- RoHS, Halogen Free and REACH Compliance

PART NUMBERING

TNR	4018	S	-	4R7	M	T	F	□□
① Series Name	② Dimensions Code	③ Feature Type		④ Nominal inductance	⑤ Inductance tolerance	⑥ Packaging	⑦ HSF Products	⑧ Design Code

①Series Name	
TNR	Wire Wound SMD Power Inductor

③Feature Type	
S	Standard

④Nominal inductance	
Code (example)	Nominal inductance［μH］
2R2	2.2
100	10
101	100

⑤Inductance tolerance	
Code (example)	Inductance tolerance
K	±10%
M	±20%
N	±30%

⑥Packaging	
T	Taping

⑦HSF Products	
F	Hazardous Substance Free Products

②Dimensions Code	
Code	Dimensions(L×W×H)[mm]
252010	2.5×2.0×1.0
252012	2.5×2.0×1.2
3010	3.0×3.0×1.0
3012	3.0×3.0×1.2
3015	3.0×3.0×1.5
4010	4.0×4.0×1.0
4012	4.0×4.0×1.2
4018	4.0×4.0×1.8
4020	4.0×4.0×2.0
4026	4.0×4.0×2.6
4030	4.0×4.0×3.0
5012	5.0×5.0×1.2
5020	5.0×5.0×2.0
5040	5.0×5.0×4.0
5045	5.0×5.0×4.5
6020	6.0×6.0×2.0
6028	6.0×6.0×2.8
6040	6.0×6.0×4.0
6045	6.0×6.0×4.5
8040	8.0×8.0×4.0
8060	8.0×8.0×6.0
8065	8.0×8.0×6.5

⑧Design Code	
□□	Standard product is blank

Dimensions & Recommended Land Pattern

Figure 1

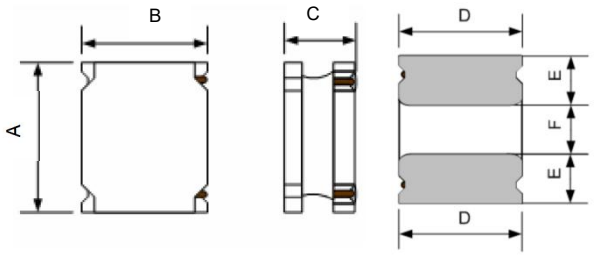


Figure 2

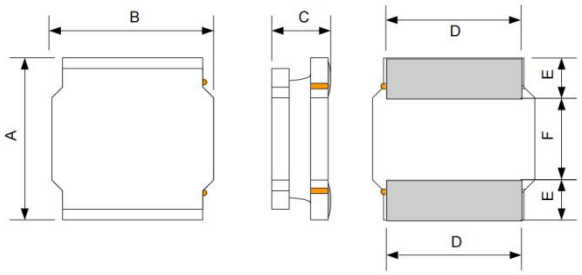
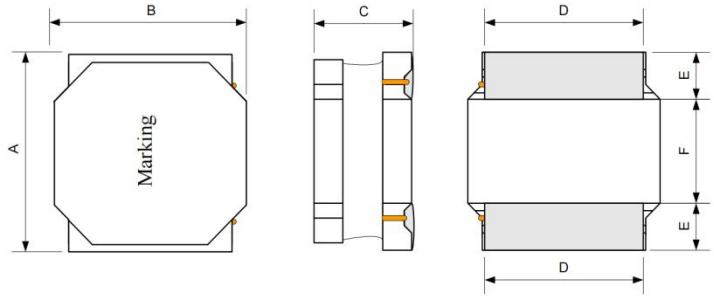
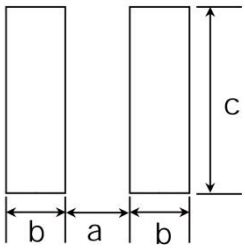


Figure 3



Recommended Land Pattern



Unit: mm

Dimensions								Recommended Land Pattern		
Series	Shape	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
TNR252010	Figure1	2.5±0.1	2.0±0.1	1.0 Max.	2.0±0.2	0.80±0.2	0.80±0.2	0.8	0.85	2
TNR252012	Figure1	2.5±0.1	2.0±0.1	1.2 Max.	2.0±0.2	0.80±0.2	0.80±0.2	0.8	0.85	2
TNR3010	Figure2	3.0±0.2	3.0±0.2	1.0 Max.	2.5±0.2	0.75±0.2	1.5±0.2	1.5	0.8	2.7
TNR3012	Figure2	3.0±0.2	3.0±0.2	1.2 Max.	2.5±0.2	0.75±0.2	1.5±0.2	1.5	0.8	2.7
TNR3015	Figure2	3.0±0.2	3.0±0.2	1.5 Max.	2.5±0.2	0.75±0.2	1.5±0.2	1.5	0.8	2.7
TNR4010	Figure2	4.0±0.2	4.0±0.2	1.0 Max.	3.3±0.2	0.95±0.2	2.1±0.2	1.9	1.1	3.7
TNR4012	Figure2	4.0±0.2	4.0±0.2	1.2 Max.	3.3±0.2	0.95±0.2	2.1±0.2	1.9	1.1	3.7
TNR4018	Figure2	4.0±0.2	4.0±0.2	1.8 Max.	3.3±0.2	0.95±0.2	2.1±0.2	1.9	1.1	3.7
TNR4020	Figure2	4.0±0.2	4.0±0.2	2.0 Max.	3.3±0.2	0.95±0.2	2.1±0.2	1.9	1.1	3.7
TNR4026	Figure3	4.0±0.2	4.0±0.2	2.6 Max.	3.3±0.2	0.95±0.2	2.1±0.2	1.9	1.1	3.7
TNR4030	Figure2	4.0±0.2	4.0±0.2	3.0 Max.	3.3±0.2	0.95±0.2	2.1±0.2	1.9	1.1	3.7
TNR5012	Figure3	5.0±0.2	5.0±0.2	1.2 Max.	4.0±0.2	1.25±0.2	2.5±0.2	2.3	1.4	4.2
TNR5020	Figure3	5.0±0.2	5.0±0.2	2.0 Max.	4.0±0.2	1.25±0.2	2.5±0.2	2.3	1.4	4.2
TNR5040	Figure3	5.0±0.2	5.0±0.2	4.0 Max.	4.0±0.2	1.25±0.2	2.5±0.2	2.3	1.4	4.2
TNR5045	Figure3	5.0±0.2	5.0±0.2	4.5 Max.	4.0±0.2	1.30±0.2	2.5±0.2	2.3	1.4	4.2
TNR6020	Figure2	6.0±0.3	6.0±0.3	2.0 Max.	4.9±0.3	1.55±0.3	2.9±0.3	2.8	1.7	5.7
TNR6028	Figure2	6.0±0.3	6.0±0.3	2.8 Max.	4.9±0.3	1.55±0.3	2.9±0.3	2.8	1.7	5.7
TNR6040	Figure2	6.0±0.3	6.0±0.3	4.0 Max.	4.9±0.3	1.55±0.3	2.9±0.3	2.8	1.7	5.7
TNR6045	Figure2	6.0±0.3	6.0±0.3	4.5 Max.	4.9±0.3	1.55±0.3	2.9±0.3	2.8	1.7	5.7
TNR8040	Figure2	8.0±0.3	8.0±0.3	4.2 Max.	6.3±0.3	2.00±0.3	4.0±0.3	3.8	2.2	7.5
TNR8065	Figure3	8.0±0.3	8.0±0.3	6.5 Max.	6.3±0.3	2.00±0.3	4.0±0.3	3.8	2.2	7.5

- All products are printed with Marking except the 252010, 252012, 3010, 3012 and 3015.
- The 3010,3012 and 3015 with Marking can be provided upon customer's request. Please contact your local sales.

Electrical Characteristics

TNR252010 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR252010S-R47□TF	0.47	2.35	2.56	2.50	3.35	206	0.056	N / M
TNR252010S-R56□TF	0.56	2.00	2.18	2.90	3.20	160	0.072	N / M
TNR252010S-R68□TF	0.68	2.00	2.18	2.20	2.75	129	0.074	N / M
TNR252010S-1R0□TF	1	1.65	1.80	1.85	2.20	100	0.108	N / M
TNR252010S-1R5□TF	1.5	1.30	1.42	1.80	2.10	81	0.182	N / M
TNR252010S-2R2□TF	2.2	1.20	1.31	1.20	1.60	61	0.209	N / M
TNR252010S-3R3MTF	3.3	0.90	0.98	1.05	1.30	47	0.328	M
TNR252010S-4R7MTF	4.7	0.70	0.76	0.95	1.15	42	0.563	M
TNR252010S-5R6MTF	5.6	0.73	0.80	0.80	0.95	35	0.563	M
TNR252010S-6R8MTF	6.8	0.59	0.64	0.78	0.92	31	0.896	M
TNR252010S-100MTF	10	0.50	0.55	0.65	0.78	27	1.092	M

TNR252012 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR252012S-R47□TF	0.47	2.15	2.34	3.82	4.27	160	0.061	N / M
TNR252012S-R68□TF	0.68	1.95	2.13	3.28	3.68	140	0.074	N / M
TNR252012S-1R0□TF	1	1.93	2.10	2.59	2.90	110	0.090	N / M
TNR252012S-1R2□TF	1.2	1.46	1.59	2.38	2.67	100	0.129	N / M
TNR252012S-1R5□TF	1.5	1.40	1.53	2.24	2.51	97	0.147	N / M
TNR252012S-2R2□TF	2.2	1.15	1.25	1.85	2.07	69	0.216	N / M
TNR252012S-2R7MTF	2.7	1.09	1.19	1.72	1.92	63	0.239	M
TNR252012S-3R3MTF	3.3	1.04	1.13	1.61	1.80	62	0.264	M
TNR252012S-3R6MTF	3.6	0.90	0.98	1.46	1.64	53	0.348	M
TNR252012S-4R3MTF	4.3	0.87	0.95	1.37	1.53	51	0.377	M
TNR252012S-4R7MTF	4.7	0.84	0.92	1.12	1.25	47	0.377	M
TNR252012S-5R1MTF	5.1	0.75	0.82	1.23	1.37	44	0.500	M
TNR252012S-5R6MTF	5.6	0.73	0.80	1.11	1.25	38	0.538	M
TNR252012S-6R2MTF	6.2	0.73	0.80	1.03	1.16	38	0.542	M
TNR252012S-6R8MTF	6.8	0.69	0.75	0.98	1.09	38	0.581	M
TNR252012S-7R5MTF	7.5	0.68	0.74	0.97	1.09	35	0.611	M
TNR252012S-8R2MTF	8.2	0.65	0.71	0.98	1.10	36	0.658	M
TNR252012S-9R1MTF	9.1	0.62	0.68	0.91	1.02	34	0.690	M
TNR252012S-100MTF	10	0.62	0.68	0.79	0.88	34	0.690	M
TNR252012S-120MTF	12	0.51	0.56	0.78	0.88	28	1.075	M
TNR252012S-150MTF	15	0.42	0.46	0.68	0.77	25	1.591	M
TNR252012S-220MTF	22	0.38	0.41	0.53	0.59	20	1.976	M

Electrical Characteristics

TNR3010 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR3010S-1R0□TF	1	1.45	1.80	1.40	2.10	180	0.085	N / M
TNR3010S-1R2□TF	1.2	1.45	1.80	1.25	1.70	137	0.085	N / M
TNR3010S-1R5□TF	1.5	1.30	1.60	1.27	1.70	120	0.104	N / M
TNR3010S-2R2□TF	2.2	1.09	1.40	1.15	1.50	100	0.143	N / M
TNR3010S-2R7□TF	2.7	1.02	1.40	1.00	1.20	90	0.169	N / M
TNR3010S-3R3□TF	3.3	0.96	1.20	0.97	1.20	74	0.189	N / M
TNR3010S-3R6MTF	3.6	0.90	1.10	0.95	1.20	67	0.215	M
TNR3010S-4R7MTF	4.7	0.77	1.10	0.75	1.05	59	0.293	M
TNR3010S-5R6MTF	5.6	0.70	1.05	0.58	0.65	40	0.322	M
TNR3010S-6R8MTF	6.8	0.66	0.96	0.55	0.72	42	0.397	M
TNR3010S-8R2MTF	8.2	0.58	0.70	0.55	0.70	23	0.520	M
TNR3010S-100MTF	10	0.58	0.70	0.55	0.75	39	0.520	M
TNR3010S-120MTF	12	0.52	0.67	0.43	0.65	36	0.657	M
TNR3010S-150MTF	15	0.47	0.57	0.42	0.57	30	0.793	M
TNR3010S-220MTF	22	0.38	0.52	0.35	0.48	28	1.209	M
TNR3010S-270MTF	27	0.35	0.50	0.30	0.45	25	1.404	M
TNR3010S-330MTF	33	0.30	0.55	0.29	0.42	18	2.015	M
TNR3010S-390MTF	39	0.28	0.53	0.28	0.38	18	2.275	M
TNR3010S-430MTF	43	0.27	0.52	0.23	0.36	18	2.340	M
TNR3010S-470MTF	47	0.26	0.52	0.22	0.35	18	2.535	M
TNR3010S-510MTF	51	0.25	0.48	0.21	0.33	18	2.860	M
TNR3010S-560MTF	56	0.24	0.35	0.21	0.28	16	3.016	M

TNR3012 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR3012S-R22□TF	0.22	3.00	3.30	5.30	6.00	321	0.022	N / M
TNR3012S-R82□TF	0.82	2.47	3.00	2.05	2.80	180	0.039	N / M
TNR3012S-1R0□TF	1	2.20	2.70	1.87	2.80	120	0.052	N / M
TNR3012S-1R2□TF	1.2	2.01	2.20	2.22	2.50	120	0.059	N / M
TNR3012S-1R5□TF	1.5	2.01	2.20	1.62	1.90	110	0.078	N / M
TNR3012S-1R8□TF	1.8	1.65	1.80	1.30	1.90	90	0.082	N / M
TNR3012S-2R2□TF	2.2	1.55	1.70	1.20	1.90	84	0.098	N / M
TNR3012S-2R4□TF	2.4	1.60	1.70	1.15	1.50	100	0.088	N / M
TNR3012S-2R7MTF	2.7	1.48	1.50	1.14	1.50	65	0.110	M
TNR3012S-3R3MTF	3.3	1.36	1.40	1.05	1.50	64	0.130	M
TNR3012S-3R6MTF	3.6	1.36	1.40	1.05	1.50	36	0.130	M
TNR3012S-3R9MTF	3.9	1.24	1.30	1.00	1.30	61	0.189	M

Electrical Characteristics

TNR3012 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR3012S-4R7MTF	4.7	1.24	1.30	0.90	1.00	61	0.156	M
TNR3012S-6R8MTF	6.8	0.98	1.10	0.75	0.90	61	0.247	M
TNR3012S-100MTF	10	0.83	0.90	0.60	0.88	42	0.345	M
TNR3012S-120MTF	12	0.73	0.84	0.48	0.67	32	0.449	M
TNR3012S-150MTF	15	0.71	0.77	0.45	0.62	27	0.468	M
TNR3012S-180MTF	18	0.58	0.65	0.43	0.59	25	0.709	M
TNR3012S-220MTF	22	0.53	0.59	0.42	0.52	23	0.839	M
TNR3012S-270MTF	27	0.47	0.51	0.35	0.48	21	1.131	M
TNR3012S-330MTF	33	0.46	0.50	0.36	0.46	18	1.138	M
TNR3012S-360MTF	36	0.44	0.48	0.34	0.44	18	1.235	M
TNR3012S-390MTF	39	0.37	0.41	0.30	0.39	18	1.729	M
TNR3012S-470MTF	47	0.35	0.40	0.27	0.35	14	1.885	M
TNR3012S-560MTF	56	0.28	0.40	0.26	0.33	9	1.794	M
TNR3012S-680MTF	68	0.33	0.37	0.24	0.29	7	2.171	M
TNR3012S-820MTF	82	0.27	0.31	0.17	0.27	7	3.302	M
TNR3012S-101MTF	100	0.25	0.29	0.21	0.23	5	3.718	M

TNR3015 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR3015S-R50☐TF	0.5	2.60	2.80	3.90	4.20	162	0.039	N / M
TNR3015S-1R0☐TF	1	2.35	2.50	2.32	2.80	150	0.039	N / M
TNR3015S-1R2☐TF	1.2	1.95	2.30	2.21	3.10	110	0.052	N / M
TNR3015S-1R5☐TF	1.5	1.70	2.20	2.30	2.70	100	0.065	N / M
TNR3015S-1R8☐TF	1.8	1.70	2.20	1.75	2.20	92	0.065	N / M
TNR3015S-2R2☐TF	2.2	1.60	2.00	1.60	2.00	86	0.078	N / M
TNR3015S-2R7☐TF	2.7	1.43	1.90	1.52	1.90	64	0.098	N / M
TNR3015S-3R3MTF	3.3	1.36	1.60	1.32	1.81	68	0.104	M
TNR3015S-3R6MTF	3.6	1.20	1.50	1.28	1.60	59	0.137	M
TNR3015S-3R9MTF	3.9	1.20	1.50	1.20	1.40	47	0.137	M
TNR3015S-4R3MTF	4.3	1.14	1.30	1.20	1.40	53	0.150	M
TNR3015S-4R7MTF	4.7	1.09	1.30	1.10	1.40	46	0.163	M
TNR3015S-5R1MTF	5.1	1.05	1.20	1.00	1.20	49	0.173	M
TNR3015S-6R2MTF	6.2	0.86	1.00	1.00	1.20	46	0.254	M
TNR3015S-6R8MTF	6.8	0.85	1.10	0.85	1.10	39	0.260	M
TNR3015S-100MTF	10	0.77	0.90	0.72	0.92	41	0.325	M
TNR3015S-120MTF	12	0.68	0.89	0.70	0.90	32	0.416	M

Electrical Characteristics

TNR3015 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR3015S-150MTF	15	0.65	0.72	0.66	0.88	30	0.455	M
TNR3015S-180MTF	18	0.59	0.72	0.56	0.72	23	0.559	M
TNR3015S-220MTF	22	0.57	0.69	0.52	0.68	23	0.598	M
TNR3015S-270MTF	27	0.45	0.56	0.48	0.56	22	0.949	M
TNR3015S-330MTF	33	0.43	0.51	0.44	0.53	20	1.066	M
TNR3015S-390MTF	39	0.39	0.44	0.41	0.55	14	1.294	M
TNR3015S-430MTF	43	0.37	0.48	0.37	0.43	16	1.378	M
TNR3015S-470MTF	47	0.35	0.44	0.35	0.43	14	1.625	M
TNR3015S-560MTF	56	0.34	0.41	0.33	0.42	13	1.664	M
TNR3015S-620MTF	62	0.30	0.41	0.30	0.40	13	2.093	M
TNR3015S-680MTF	68	0.23	0.31	0.28	0.37	11	3.510	M
TNR3015S-101MTF	100	0.21	0.25	0.23	0.25	7.2	4.043	M
TNR3015S-151MTF	150	0.19	0.23	0.18	0.22	4.5	4.940	M

TNR4010 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR4010S-1R0□TF	1	1.90	2.40	2.00	2.30	104	0.067	N / M
TNR4010S-1R5□TF	1.5	1.70	2.00	1.68	2.00	71	0.084	N / M
TNR4010S-2R2MTF	2.2	1.50	2.00	1.20	1.50	52	0.102	M
TNR4010S-3R3MTF	3.3	1.40	1.80	1.10	1.40	42	0.120	M
TNR4010S-4R7MTF	4.7	1.20	1.50	0.95	1.10	30	0.168	M
TNR4010S-6R8MTF	6.8	1.00	1.20	0.80	0.95	26	0.240	M
TNR4010S-100MTF	10	0.75	1.00	0.62	0.75	19	0.360	M
TNR4010S-150MTF	15	0.60	0.85	0.54	0.61	17	0.516	M
TNR4010S-220MTF	22	0.50	0.75	0.45	0.52	11	0.684	M

Electrical Characteristics

TNR4012 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR4012S-R82☐TF	0.82	1.65	2.50	3.02	3.30	150	0.065	N / M
TNR4012S-1R0☐TF	1	1.65	2.50	2.61	3.20	120	0.065	N / M
TNR4012S-1R5☐TF	1.5	1.46	2.20	2.10	2.70	90	0.085	N / M
TNR4012S-1R8☐TF	1.8	1.32	1.90	2.12	2.60	88	0.104	N / M
TNR4012S-2R2☐TF	2.2	1.32	1.90	1.76	2.30	74	0.104	N / M
TNR4012S-2R7☐TF	2.7	1.25	1.70	1.90	2.30	71	0.117	N / M
TNR4012S-3R3☐TF	3.3	1.12	1.60	1.72	2.10	60	0.143	N / M
TNR4012S-3R6☐TF	3.6	1.12	1.60	1.20	1.70	57	0.143	N / M
TNR4012S-4R3☐TF	4.3	1.00	1.50	1.58	1.70	54	0.182	N / M
TNR4012S-4R7☐TF	4.7	1.05	1.50	1.15	1.80	50	0.163	N / M
TNR4012S-5R1☐TF	5.1	0.95	1.50	1.55	1.60	50	0.201	N / M
TNR4012S-5R6☐TF	5.6	1.00	1.20	1.00	1.60	42	0.182	N / M
TNR4012S-6R8MTF	6.8	0.84	1.20	0.85	1.40	40	0.257	M
TNR4012S-100MTF	10	0.77	1.00	0.80	1.10	33	0.345	M
TNR4012S-120MTF	12	0.70	0.95	0.66	1.00	32	0.377	M
TNR4012S-150MTF	15	0.64	0.85	0.56	0.80	25	0.442	M
TNR4012S-180MTF	18	0.55	0.80	0.55	0.75	23	0.611	M
TNR4012S-220MTF	22	0.49	0.75	0.46	0.70	20	0.763	M
TNR4012S-270MTF	27	0.45	0.60	0.50	0.70	18	0.936	M
TNR4012S-330MTF	33	0.42	0.58	0.42	0.60	17	1.053	M
TNR4012S-360MTF	36	0.40	0.56	0.40	0.50	14	1.170	M
TNR4012S-390MTF	39	0.37	0.50	0.55	0.66	16	1.430	M
TNR4012S-470MTF	47	0.37	0.50	0.35	0.50	12	1.430	M
TNR4012S-560MTF	56	0.33	0.46	0.33	0.45	11	1.625	M
TNR4012S-680MTF	68	0.27	0.45	0.38	0.45	11	2.535	M
TNR4012S-820MTF	82	0.26	0.36	0.28	0.40	11	2.782	M
TNR4012S-101MTF	100	0.25	0.35	0.25	0.30	9.4	2.873	M

TNR4018 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR4018S-R47☐TF	0.47	4.00	4.50	4.30	5.20	155	0.018	N / M
TNR4018S-R68☐TF	0.68	3.30	3.80	4.90	5.60	128	0.026	N / M
TNR4018S-1R0☐TF	1	2.00	3.30	4.80	5.20	80	0.033	N / M
TNR4018S-1R5☐TF	1.5	1.80	3.20	3.35	4.00	65	0.039	N / M
TNR4018S-1R8☐TF	1.8	2.00	2.80	3.00	3.40	54	0.044	N / M
TNR4018S-2R2☐TF	2.2	1.65	2.60	2.70	3.20	52	0.059	N / M

Electrical Characteristics

TNR4018 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR4018S-3R3MTF	3.3	1.23	2.10	2.45	2.90	44	0.091	M
TNR4018S-4R7MTF	4.7	1.20	1.80	1.70	2.20	34	0.117	M
TNR4018S-6R8MTF	6.8	1.06	1.50	1.45	2.00	29	0.143	M
TNR4018S-100MTF	10	0.84	1.20	1.30	1.60	24	0.234	M
TNR4018S-150MTF	15	0.65	1.00	0.94	1.10	19	0.325	M
TNR4018S-220MTF	22	0.59	0.85	0.80	0.88	16	0.468	M
TNR4018S-330MTF	33	0.49	0.72	0.56	0.75	12	0.689	M
TNR4018S-470MTF	47	0.42	0.65	0.57	0.70	10	0.845	M
TNR4018S-680MTF	68	0.32	0.52	0.47	0.51	8.3	1.300	M
TNR4018S-101MTF	100	0.25	0.41	0.40	0.44	6.5	2.275	M
TNR4018S-151MTF	150	0.22	0.36	0.31	0.34	5.5	3.250	M
TNR4018S-221MTF	220	0.17	0.27	0.27	0.30	4	5.200	M

TNR4020 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR4020S-R24MTF	0.24	4.50	5.20	10.50	12.50	283	0.014	M
TNR4020S-R33□TF	0.33	3.30	4.90	7.50	8.50	223	0.016	N / M
TNR4020S-R47□TF	0.47	3.30	3.70	7.00	7.50	160	0.029	N / M
TNR4020S-R68□TF	0.68	2.80	3.30	6.40	6.60	120	0.036	N / M
TNR4020S-1R0□TF	1	2.15	3.20	4.78	5.20	75	0.038	N / M
TNR4020S-1R2□TF	1.2	2.15	3.20	5.10	5.60	72	0.038	N / M
TNR4020S-1R5□TF	1.5	1.98	3.00	4.45	4.90	71	0.046	N / M
TNR4020S-2R2□TF	2.2	1.85	2.80	3.40	3.70	49	0.052	N / M
TNR4020S-3R3□TF	3.3	1.40	2.50	3.20	3.50	44	0.091	N / M
TNR4020S-3R6□TF	3.6	1.54	2.50	2.80	3.00	49	0.072	N / M
TNR4020S-4R7□TF	4.7	1.34	2.00	2.35	2.50	42	0.098	N / M
TNR4020S-5R1MTF	5.1	1.27	1.80	2.30	2.50	42	0.111	M
TNR4020S-5R6MTF	5.6	1.22	1.80	2.20	2.40	30	0.117	M
TNR4020S-6R2MTF	6.2	1.08	1.60	2.15	2.30	36	0.150	M
TNR4020S-6R8MTF	6.8	1.04	1.60	2.20	2.40	33	0.163	M
TNR4020S-7R5MTF	7.5	1.08	1.50	1.85	2.00	30	0.150	M
TNR4020S-8R2MTF	8.2	1.04	1.40	1.75	1.90	27	0.163	M
TNR4020S-100MTF	10	0.90	1.20	1.60	1.70	26	0.215	M
TNR4020S-120MTF	12	0.88	1.20	1.50	1.60	26	0.228	M
TNR4020S-150MTF	15	0.77	1.10	1.35	1.50	24	0.299	M
TNR4020S-220MTF	22	0.62	0.87	1.05	1.10	15	0.455	M

Electrical Characteristics

TNR4020 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR4020S-270MTF	27	0.50	0.70	1.02	1.10	14	0.709	M
TNR4020S-330MTF	33	0.49	0.68	0.85	0.93	11	0.715	M
TNR4020S-390MTF	39	0.46	0.64	0.82	0.90	11	0.845	M
TNR4020S-430MTF	43	0.45	0.63	0.77	0.85	10	0.858	M
TNR4020S-470MTF	47	0.44	0.61	0.74	0.81	10	0.923	M
TNR4020S-510MTF	51	0.42	0.59	0.70	0.77	10	0.975	M
TNR4020S-560MTF	56	0.41	0.57	0.66	0.72	10	1.040	M
TNR4020S-620MTF	62	0.39	0.52	0.65	0.71	9.6	1.170	M
TNR4020S-680MTF	68	0.36	0.50	0.61	0.67	7.7	1.380	M
TNR4020S-750MTF	75	0.35	0.49	0.70	0.77	7.7	1.510	M
TNR4020S-820MTF	82	0.34	0.47	0.50	0.55	7.2	1.520	M
TNR4020S-101MTF	100	0.31	0.43	0.48	0.53	6.3	2.020	M

TNR4026 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR4026S-1R0☐TF	1	3.05	3.66	3.35	3.72	151	0.031	N / M
TNR4026S-1R2☐TF	1.2	2.33	2.80	3.15	3.50	120	0.039	N / M
TNR4026S-1R5☐TF	1.5	2.33	2.80	2.44	2.71	100	0.039	N / M
TNR4026S-2R2MTF	2.2	2.03	2.44	2.13	2.36	96	0.051	M
TNR4026S-3R3MTF	3.3	1.73	2.08	1.83	2.03	58	0.064	M
TNR4026S-4R7MTF	4.7	1.62	1.94	1.47	1.63	46	0.071	M
TNR4026S-6R8MTF	6.8	1.52	1.82	1.32	1.47	33	0.084	M
TNR4026S-100MTF	10	1.32	1.58	1.02	1.13	26	0.109	M
TNR4026S-150MTF	15	1.12	1.34	0.91	1.01	19	0.142	M
TNR4026S-220MTF	22	0.91	1.09	0.61	0.68	13	0.212	M
TNR4026S-330MTF	33	0.71	0.85	0.56	0.62	9	0.347	M
TNR4026S-470MTF	47	0.66	0.79	0.41	0.46	6	0.386	M

TNR4030 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR4030S-R68☐TF	0.68	4.56	5.10	6.80	8.00	130	0.013	N / M
TNR4030S-R91☐TF	0.91	4.15	4.70	6.25	6.80	100	0.017	N / M

Electrical Characteristics

● TNR4030 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR4030S-1R0□TF	1	4.15	4.70	5.26	5.70	70	0.018	N / M
TNR4030S-1R2□TF	1.2	3.82	4.20	5.80	6.30	80	0.020	N / M
TNR4030S-1R5□TF	1.5	3.34	3.60	4.84	5.30	62	0.026	N / M
TNR4030S-1R8□TF	1.8	3.20	3.30	4.50	5.00	60	0.033	N / M
TNR4030S-2R2□TF	2.2	2.95	3.20	4.90	5.80	52	0.039	N / M
TNR4030S-3R3MTF	3.3	2.40	2.60	3.30	3.60	38	0.052	M
TNR4030S-3R9MTF	3.9	2.10	2.30	3.00	3.30	32	0.074	M
TNR4030S-4R3MTF	4.3	2.10	2.30	2.95	3.20	37	0.072	M
TNR4030S-4R7MTF	4.7	2.00	2.30	2.90	3.20	31	0.078	M
TNR4030S-5R6MTF	5.6	1.95	2.10	2.60	2.80	30	0.085	M
TNR4030S-6R8MTF	6.8	1.60	1.70	2.75	3.00	24	0.117	M
TNR4030S-7R5MTF	7.5	1.65	1.80	2.20	2.40	26	0.111	M
TNR4030S-8R2MTF	8.2	1.60	1.70	2.10	2.30	26	0.117	M
TNR4030S-100MTF	10	1.50	1.60	1.95	2.40	21	0.130	M
TNR4030S-120MTF	12	1.30	1.40	1.70	1.80	18	0.176	M
TNR4030S-150MTF	15	1.11	1.20	1.65	1.80	16	0.247	M
TNR4030S-180MTF	18	1.10	1.20	1.40	1.50	10	0.260	M
TNR4030S-220MTF	22	1.00	1.20	1.30	1.40	10	0.293	M
TNR4030S-330MTF	33	0.84	0.92	1.10	1.20	10	0.429	M
TNR4030S-360MTF	36	0.83	0.91	1.05	1.10	9.8	0.436	M
TNR4030S-390MTF	39	0.73	0.80	1.03	1.10	10	0.566	M
TNR4030S-470MTF	47	0.72	0.80	0.95	1.00	8.4	0.579	M
TNR4030S-510MTF	51	0.70	0.80	0.90	1.13	8.4	0.611	M
TNR4030S-560MTF	56	0.65	0.71	0.85	0.94	8.4	0.722	M
TNR4030S-620MTF	62	0.63	0.70	0.80	0.99	7	0.760	M
TNR4030S-680MTF	68	0.52	0.57	0.72	0.80	7	1.128	M
TNR4030S-750MTF	75	0.48	0.53	0.70	0.88	6.3	1.326	M
TNR4030S-820MTF	82	0.47	0.52	0.66	0.72	5.6	1.378	M
TNR4030S-910MTF	91	0.46	0.50	0.65	0.71	5.6	1.430	M
TNR4030S-101MTF	100	0.45	0.49	0.60	0.73	5.6	1.495	M
TNR4030S-121MTF	120	0.42	0.46	0.55	0.60	5.4	1.755	M
TNR4030S-151MTF	150	0.30	0.35	0.50	0.55	4	2.340	M
TNR4030S-221MTF	220	0.35	0.40	0.40	0.50	4.2	3.250	M
TNR4030S-331MTF	330	0.25	0.26	0.30	0.40	2.7	5.200	M
TNR4030S-471□TF	470	0.20	0.23	0.30	0.35	2	9.360	K/M
TNR4030S-501MTF	500	0.15	0.20	0.28	0.30	2	9.027	M
TNR4030S-681MTF	680	0.14	0.18	0.19	0.20	1.2	9.854	M

Electrical Characteristics

TNR5012 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR5012S-1R0□TF	1	2.00	2.40	4.40	4.70	103	0.068	N / M
TNR5012S-1R5□TF	1.5	1.90	2.20	3.70	3.80	68	0.086	N / M
TNR5012S-2R2□TF	2.2	1.70	2.00	3.10	3.20	50	0.108	N / M
TNR5012S-3R3□TF	3.3	1.40	1.70	2.40	2.60	34	0.151	N / M
TNR5012S-4R7□TF	4.7	1.30	1.50	2.20	2.30	31	0.197	N / M
TNR5012S-6R8MTF	6.8	1.00	1.20	1.70	1.90	22	0.294	M
TNR5012S-100MTF	10	0.85	1.00	1.40	1.50	17	0.413	M
TNR5012S-150MTF	15	0.80	0.92	1.20	1.30	13	0.523	M
TNR5012S-220MTF	22	0.60	0.68	0.88	0.98	16	0.858	M

TNR5020 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR5020S-R22□TF	0.22	5.30	6.00	9.00	12.00	280	0.011	N / M
TNR5020S-R24□TF	0.24	5.30	6.00	8.00	10.00	248	0.011	N / M
TNR5020S-R47□TF	0.47	4.60	5.00	6.15	6.70	160	0.017	N / M
TNR5020S-R56□TF	0.56	3.80	4.20	8.50	9.60	137	0.022	N / M
TNR5020S-R68□TF	0.68	4.00	4.40	5.50	6.00	120	0.022	N / M
TNR5020S-R75□TF	0.75	4.00	4.40	5.50	6.00	117	0.022	N / M
TNR5020S-1R0□TF	1	3.80	4.10	4.10	5.00	114	0.026	N / M
TNR5020S-1R2□TF	1.2	3.55	3.90	4.50	4.90	83	0.029	N / M
TNR5020S-1R5□TF	1.5	3.20	3.50	4.10	4.50	68	0.034	N / M
TNR5020S-2R2□TF	2.2	2.90	3.10	3.20	4.00	57	0.042	N / M
TNR5020S-2R7□TF	2.7	2.70	2.90	2.90	3.50	52	0.049	N / M
TNR5020S-3R0□TF	3	2.70	2.90	2.55	2.80	49	0.049	N / M
TNR5020S-3R3□TF	3.3	2.50	2.70	2.55	3.00	46	0.056	N / M
TNR5020S-3R6□TF	3.6	2.50	2.70	2.80	3.00	43	0.056	N / M
TNR5020S-3R9□TF	3.9	2.50	2.70	2.30	2.80	40	0.056	N / M
TNR5020S-4R3MTF	4.3	2.20	2.40	2.50	3.00	37	0.074	M
TNR5020S-4R7MTF	4.7	2.20	2.40	2.50	2.70	37	0.074	M
TNR5020S-5R1MTF	5.1	2.05	2.20	2.25	2.60	32	0.083	M
TNR5020S-5R6MTF	5.6	2.05	2.20	2.30	2.50	32	0.083	M
TNR5020S-6R8MTF	6.8	1.80	1.90	2.05	2.20	30	0.108	M
TNR5020S-7R5MTF	7.5	1.75	1.90	1.85	2.00	26	0.117	M
TNR5020S-8R2MTF	8.2	1.65	1.80	1.85	2.00	26	0.127	M
TNR5020S-9R1MTF	9.1	1.55	1.70	1.70	1.80	24	0.143	M
TNR5020S-100MTF	10	1.55	1.70	1.70	1.80	24	0.143	M

Electrical Characteristics

TNR5020 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR5020S-120MTF	12	1.40	1.50	1.50	1.60	22	0.182	M
TNR5020S-150MTF	15	1.25	1.30	1.35	1.40	20	0.215	M
TNR5020S-180MTF	18	1.15	1.20	1.25	1.30	16	0.260	M
TNR5020S-220MTF	22	1.10	1.20	1.15	1.20	14	0.294	M
TNR5020S-330MTF	33	0.90	0.99	0.92	1.00	10	0.507	M
TNR5020S-470MTF	47	0.77	0.84	0.77	0.84	7	0.680	M
TNR5020S-560MTF	56	0.70	0.77	0.77	0.84	6	0.819	M
TNR5020S-680MTF	68	0.64	0.70	0.65	0.70	6	0.962	M
TNR5020S-820MTF	82	0.50	0.60	0.65	0.75	6	1.158	M
TNR5020S-101MTF	100	0.53	0.58	0.53	0.58	6	1.430	M
TNR5020S-121MTF	120	0.40	0.50	0.42	0.53	6	1.755	M
TNR5020S-201MTF	200	0.40	0.45	0.30	0.33	4.5	2.600	M

TNR5040 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR5040S-R22MTF	0.22	6.50	7.50	18.00	20.00	289	0.008	M
TNR5040S-R24□TF	0.24	6.40	7.40	15.70	18.00	251	0.008	N / M
TNR5040S-R47MTF	0.47	6.60	7.60	10.00	11.50	171	0.013	M
TNR5040S-1R0□TF	1	4.90	5.10	7.35	8.20	117	0.018	N / M
TNR5040S-1R2□TF	1.2	4.15	4.30	6.50	7.10	110	0.021	N / M
TNR5040S-1R5□TF	1.5	4.30	4.80	6.30	7.30	86	0.020	N / M
TNR5040S-1R8MTF	1.8	4.15	4.30	5.50	6.40	55	0.021	M
TNR5040S-2R2□TF	2.2	3.80	4.30	4.90	5.60	50	0.027	N / M
TNR5040S-2R7□TF	2.7	3.60	4.10	4.30	5.10	37	0.029	N / M
TNR5040S-3R0□TF	3	3.60	4.20	4.15	4.80	37	0.029	N / M
TNR5040S-3R3□TF	3.3	3.40	3.90	3.95	4.60	32	0.031	N / M
TNR5040S-3R6MTF	3.6	3.30	3.70	3.80	4.40	30	0.031	M
TNR5040S-3R9□TF	3.9	3.20	3.70	3.55	4.20	29	0.035	N / M
TNR5040S-4R7□TF	4.7	3.00	3.30	3.50	3.90	28	0.041	N / M
TNR5040S-5R6MTF	5.6	2.80	3.10	3.00	4.10	27	0.046	M
TNR5040S-6R8MTF	6.8	2.50	2.80	2.90	3.50	21	0.056	M
TNR5040S-8R2MTF	8.2	2.30	2.60	2.70	3.00	20	0.062	M
TNR5040S-100MTF	10	2.10	2.40	2.35	2.90	18	0.083	M
TNR5040S-120MTF	12	2.00	2.10	2.20	2.50	14	0.100	M
TNR5040S-150MTF	15	2.00	2.10	2.00	2.30	13	0.112	M
TNR5040S-180MTF	18	1.45	1.65	1.70	2.00	12	0.155	M

Electrical Characteristics

TNR5040 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR5040S-220MTF	22	1.50	1.60	1.60	1.90	11	0.168	M
TNR5040S-270MTF	27	1.10	1.25	1.52	1.75	9.8	0.244	M
TNR5040S-330MTF	33	1.20	1.40	1.30	1.50	9	0.244	M
TNR5040S-470MTF	47	1.00	1.10	1.10	1.30	7	0.354	M
TNR5040S-510MTF	51	1.00	1.10	1.00	1.20	6	0.494	M
TNR5040S-560MTF	56	0.80	0.90	1.05	1.20	6	0.494	M
TNR5040S-680MTF	68	0.80	0.90	0.90	1.10	6	0.520	M
TNR5040S-750MTF	75	0.72	0.80	0.85	0.95	6	0.585	M
TNR5040S-101MTF	100	0.70	0.80	0.75	0.90	5	0.728	M
TNR5040S-151MTF	150	0.60	0.70	0.65	0.67	3.7	0.975	M
TNR5040S-221MTF	220	0.40	0.50	0.48	0.55	3	1.820	M
TNR5040S-301MTF	300	0.35	0.40	0.50	0.58	2.7	2.600	M
TNR5040S-331MTF	330	0.40	0.50	0.42	0.47	2.7	2.730	M
TNR5040S-471MTF	470	0.35	0.40	0.37	0.43	2.7	3.900	M
TNR5040S-561MTF	560	0.31	0.35	0.31	0.36	1.5	4.920	M
TNR5040S-681MTF	680	0.25	0.30	0.30	0.35	1.6	5.070	M
TNR5040S-102MTF	1000	0.20	0.23	0.21	0.25	1.3	7.800	M

TNR5045 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR5045S-2R2MTF	2.2	4.70	5.40	6.40	7.20	50	0.029	M
TNR5045S-100MTF	10	2.50	2.90	3.20	3.70	17	0.079	M
TNR5045S-220MTF	22	1.55	1.80	2.00	2.35	10	0.163	M

TNR6020 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR6020S-R50☐TF	0.5	4.00	5.00	4.50	6.00	120	0.018	N / M
TNR6020S-R68☐TF	0.68	3.80	4.80	6.55	7.80	115	0.022	N / M
TNR6020S-R82☐TF	0.82	3.80	4.80	5.30	6.30	110	0.022	N / M
TNR6020S-1R0☐TF	1	3.50	4.40	4.15	5.00	100	0.026	N / M
TNR6020S-1R2☐TF	1.2	3.20	4.00	5.90	7.00	88	0.029	N / M
TNR6020S-1R5☐TF	1.5	3.20	4.00	4.25	5.10	79	0.029	N / M

Electrical Characteristics

TNR6020 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR6020S-1R8□TF	1.8	2.75	3.50	4.85	5.80	68	0.036	N / M
TNR6020S-2R0□TF	2	2.60	3.30	4.10	4.90	65	0.046	N / M
TNR6020S-2R2□TF	2.2	2.75	3.50	3.75	4.50	61	0.036	N / M
TNR6020S-2R7□TF	2.7	2.60	3.30	3.90	4.60	56	0.046	N / M
TNR6020S-3R3□TF	3.3	2.60	3.30	3.15	3.70	51	0.046	N / M
TNR6020S-3R9□TF	3.9	2.10	2.60	3.25	3.90	45	0.064	N / M
TNR6020S-4R3□TF	4.3	2.10	2.60	2.70	3.20	44	0.064	N / M
TNR6020S-4R7□TF	4.7	2.00	2.50	3.00	3.60	41	0.075	N / M
TNR6020S-5R6□TF	5.6	1.90	2.40	2.40	2.90	36	0.075	N / M
TNR6020S-6R2□TF	6.2	1.80	2.30	2.30	2.70	31	0.103	N / M
TNR6020S-6R8□TF	6.8	1.80	2.30	2.20	2.60	31	0.103	N / M
TNR6020S-8R2□TF	8.2	1.40	1.80	2.10	2.50	27	0.137	N / M
TNR6020S-100MTF	10	1.40	1.80	1.75	2.10	27	0.137	M
TNR6020S-120MTF	12	1.30	1.60	1.45	1.70	25	0.156	M
TNR6020S-150MTF	15	1.20	1.50	1.20	1.40	21	0.189	M
TNR6020S-180MTF	18	1.08	1.40	1.20	1.40	18	0.234	M
TNR6020S-220MTF	22	1.00	1.30	1.05	1.20	16	0.265	M
TNR6020S-330MTF	33	0.84	1.05	0.95	1.10	11	0.390	M
TNR6020S-470MTF	47	0.80	0.90	0.70	0.90	10	0.559	M
TNR6020S-331MTF	330	0.33	0.39	0.27	0.33	3	3.419	M

TNR6028 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR6028S-R82□TF	0.82	5.20	6.00	6.50	9.00	97	0.016	N / M
TNR6028S-1R0□TF	1	5.20	5.70	5.75	7.00	70	0.013	N / M
TNR6028S-1R2□TF	1.2	4.58	5.00	6.40	7.50	69	0.017	N / M
TNR6028S-1R5□TF	1.5	4.58	5.00	6.00	6.60	65	0.017	N / M
TNR6028S-2R2□TF	2.2	3.75	4.10	5.10	5.60	48	0.026	N / M
TNR6028S-2R7□TF	2.7	3.75	4.10	3.80	4.10	48	0.026	N / M
TNR6028S-3R3□TF	3.3	3.48	3.80	4.15	4.50	41	0.033	N / M
TNR6028S-4R7□TF	4.7	3.08	3.40	3.00	3.30	35	0.039	N / M
TNR6028S-5R1□TF	5.1	2.60	2.80	3.20	3.50	32	0.056	N / M
TNR6028S-6R2MTF	6.2	2.40	2.60	3.05	3.30	30	0.061	M
TNR6028S-6R8MTF	6.8	2.40	2.60	2.60	3.00	27	0.061	M
TNR6028S-8R2MTF	8.2	2.25	2.50	2.30	2.50	24	0.072	M
TNR6028S-9R1MTF	9.1	2.15	2.40	2.55	2.80	24	0.096	M

Electrical Characteristics

TNR6028 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR6028S-100MTF	10	1.95	2.40	2.04	2.50	23	0.094	M
TNR6028S-120MTF	12	1.85	2.00	1.80	2.00	18	0.104	M
TNR6028S-150MTF	15	1.45	1.60	1.75	1.90	18	0.163	M
TNR6028S-180MTF	18	1.45	1.60	1.52	1.80	15	0.156	M
TNR6028S-220MTF	22	1.40	1.60	1.45	1.80	14	0.182	M
TNR6028S-270MTF	27	1.32	1.40	1.50	1.60	13	0.202	M
TNR6028S-330MTF	33	1.22	1.30	1.35	1.50	12	0.241	M
TNR6028S-360MTF	36	1.13	1.20	1.25	1.40	11	0.280	M
TNR6028S-390MTF	39	1.10	1.20	1.25	1.40	11	0.293	M
TNR6028S-470MTF	47	1.06	1.10	1.15	1.30	9.5	0.410	M
TNR6028S-560MTF	56	0.89	1.00	1.05	1.20	8.2	0.449	M
TNR6028S-680MTF	68	0.86	0.95	0.80	0.95	7.7	0.468	M
TNR6028S-750MTF	75	0.81	0.90	0.90	0.99	7.7	0.533	M
TNR6028S-820MTF	82	0.70	0.77	0.80	0.88	7.7	0.650	M
TNR6028S-101MTF	100	0.70	0.77	0.65	0.71	7.1	0.650	M
TNR6028S-401MTF	400	0.40	0.45	0.30	0.33	2.8	2.808	M
TNR6028S-102MTF	1000	0.23	0.26	0.18	0.22	1.5	7.540	M

TNR6040 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR6040S-100MTF	10	2.45	2.80	3.20	3.50	16	0.062	M
TNR6040S-150MTF	15	2.05	2.35	2.50	3.00	13	0.088	M

TNR6045 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR6045S-R47☐TF	0.47	6.50	6.60	15.00	16.50	155	0.008	N / M
TNR6045S-R56☐TF	0.56	6.50	6.60	14.00	15.00	142	0.008	N / M
TNR6045S-R68☐TF	0.68	5.70	6.50	11.00	12.00	99	0.008	N / M
TNR6045S-R82☐TF	0.82	5.90	6.50	10.35	11.00	140	0.010	N / M
TNR6045S-1R0☐TF	1	5.14	5.60	9.85	10.00	100	0.014	N / M
TNR6045S-1R2☐TF	1.2	5.40	5.90	8.35	9.10	100	0.013	N / M
TNR6045S-1R3☐TF	1.3	5.40	5.90	8.35	9.10	100	0.013	N / M

Electrical Characteristics

● TNR6045 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR6045S-1R5□TF	1.5	4.95	5.40	8.80	9.70	65	0.016	N / M
TNR6045S-1R8□TF	1.8	4.95	5.40	7.60	8.40	74	0.016	N / M
TNR6045S-2R2□TF	2.2	4.60	5.00	6.75	7.40	52	0.023	N / M
TNR6045S-2R3□TF	2.3	3.50	3.80	6.00	6.60	60	0.027	N / M
TNR6045S-2R7□TF	2.7	4.30	4.70	5.75	6.30	38	0.020	N / M
TNR6045S-3R0□TF	3	3.80	4.20	5.60	6.20	35	0.026	N / M
TNR6045S-3R3□TF	3.3	3.70	4.00	5.90	6.20	32	0.027	N / M
TNR6045S-3R6□TF	3.6	3.70	4.00	5.25	5.70	28	0.027	N / M
TNR6045S-4R3MTF	4.3	3.50	3.80	4.45	4.90	23	0.030	M
TNR6045S-4R5MTF	4.5	3.30	3.60	4.97	5.50	24	0.034	M
TNR6045S-4R7MTF	4.7	3.30	3.60	4.97	5.50	24	0.034	M
TNR6045S-5R1MTF	5.1	3.30	3.60	4.40	4.80	23	0.034	M
TNR6045S-5R6MTF	5.6	3.15	3.40	4.15	4.60	23	0.038	M
TNR6045S-6R2MTF	6.2	3.00	3.30	4.43	4.80	26	0.040	M
TNR6045S-6R3MTF	6.3	3.00	3.30	4.43	4.70	26	0.040	M
TNR6045S-6R8MTF	6.8	3.00	3.30	3.90	4.30	20	0.040	M
TNR6045S-7R5MTF	7.5	2.90	3.20	3.50	3.80	18	0.044	M
TNR6045S-8R2MTF	8.2	2.60	2.80	3.90	4.30	21	0.060	M
TNR6045S-9R1MTF	9.1	2.60	2.80	3.35	3.70	17	0.056	M
TNR6045S-100MTF	10	2.45	2.70	3.20	3.50	15	0.062	M
TNR6045S-120MTF	12	2.20	2.40	2.80	3.00	13	0.075	M
TNR6045S-150MTF	15	2.05	2.20	2.50	2.70	12	0.088	M
TNR6045S-180MTF	18	1.85	2.00	2.20	2.40	10	0.105	M
TNR6045S-220MTF	22	1.80	2.00	2.05	2.20	10	0.116	M
TNR6045S-270MTF	27	1.65	1.80	1.90	2.10	9.2	0.133	M
TNR6045S-300MTF	30	1.50	1.60	1.70	1.80	7.8	0.172	M
TNR6045S-330MTF	33	1.45	1.60	1.65	1.80	7.8	0.178	M
TNR6045S-360MTF	36	1.40	1.50	1.62	1.80	7.8	0.225	M
TNR6045S-390MTF	39	1.25	1.40	1.50	1.60	7.8	0.234	M
TNR6045S-430MTF	43	1.20	1.30	1.63	1.80	7.7	0.260	M
TNR6045S-470MTF	47	1.20	1.30	1.40	1.50	6.4	0.260	M
TNR6045S-510MTF	51	1.15	1.20	1.35	1.50	6.4	0.269	M
TNR6045S-560MTF	56	1.10	1.20	1.30	1.40	6.4	0.287	M
TNR6045S-620MTF	62	1.10	1.20	1.25	1.40	6.4	0.306	M
TNR6045S-680MTF	68	1.00	1.10	1.20	1.30	6.4	0.376	M
TNR6045S-750MTF	75	0.95	1.00	1.15	1.20	5	0.397	M
TNR6045S-820MTF	82	0.90	0.99	1.05	1.10	4.9	0.500	M
TNR6045S-910MTF	91	0.85	0.94	1.00	1.10	4.9	0.467	M
TNR6045S-101MTF	100	0.80	0.88	0.95	1.00	4.2	0.563	M
TNR6045S-121MTF	120	0.77	0.85	0.85	0.94	4.2	0.629	M

Electrical Characteristics

TNR6045 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR6045S-151MTF	150	0.70	0.77	0.80	0.88	4.2	0.754	M
TNR6045S-221MTF	220	0.59	0.65	0.70	0.77	3.5	1.084	M
TNR6045S-331MTF	330	0.57	0.63	0.57	0.63	2.8	1.651	M
TNR6045S-471MTF	470	0.42	0.48	0.50	0.56	2	2.340	M
TNR6045S-681MTF	680	0.33	0.38	0.42	0.46	1.7	3.250	M
TNR6045S-102MTF	1000	0.30	0.35	0.30	0.35	1.3	5.850	M

TNR8040 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR8040S-R82☐TF	0.82	6.30	6.90	13.80	16.00	94	0.010	N / M
TNR8040S-1R0☐TF	1	6.30	6.90	9.85	14.00	89	0.010	N / M
TNR8040S-1R2☐TF	1.2	5.65	6.20	10.00	14.00	59	0.013	N / M
TNR8040S-1R5☐TF	1.5	5.65	6.20	8.15	11.00	67	0.013	N / M
TNR8040S-2R0☐TF	2	5.15	5.60	9.25	10.00	43	0.016	N / M
TNR8040S-2R2☐TF	2.2	5.15	5.60	7.10	8.00	41	0.016	N / M
TNR8040S-3R0☐TF	3	4.70	5.20	6.10	7.00	32	0.018	N / M
TNR8040S-3R3☐TF	3.3	4.40	4.80	6.50	7.00	27	0.022	N / M
TNR8040S-3R6☐TF	3.6	4.35	4.80	7.52	8.50	30	0.022	N / M
TNR8040S-3R9☐TF	3.9	4.35	4.80	5.75	6.50	26	0.022	N / M
TNR8040S-4R7☐TF	4.7	4.10	4.50	5.90	6.50	24	0.025	N / M
TNR8040S-5R1☐TF	5.1	4.05	4.40	4.70	5.40	22	0.025	N / M
TNR8040S-5R6☐TF	5.6	3.85	4.20	6.00	6.90	24	0.027	N / M
TNR8040S-6R2☐TF	6.2	3.85	4.20	4.45	5.10	20	0.027	N / M
TNR8040S-6R8MTF	6.8	3.60	4.00	4.55	5.20	20	0.031	M
TNR8040S-8R2MTF	8.2	3.45	3.80	4.20	4.80	17	0.034	M
TNR8040S-100MTF	10	3.30	3.60	3.60	4.10	15	0.038	M
TNR8040S-120MTF	12	2.80	3.00	3.50	4.00	13	0.053	M
TNR8040S-150MTF	15	2.60	2.80	2.95	3.40	12	0.061	M
TNR8040S-180MTF	18	2.40	2.60	2.70	3.10	11	0.069	M
TNR8040S-220MTF	22	2.10	2.30	2.40	2.70	9.5	0.090	M
TNR8040S-270MTF	27	2.00	2.20	2.15	2.50	9.2	0.101	M
TNR8040S-330MTF	33	1.80	2.00	2.05	2.40	7.8	0.126	M
TNR8040S-360MTF	36	1.75	1.90	2.00	2.30	7.8	0.133	M
TNR8040S-390MTF	39	1.70	1.90	1.95	2.20	7.8	0.139	M
TNR8040S-430MTF	43	1.65	1.80	1.90	2.20	7.8	0.147	M
TNR8040S-470MTF	47	1.55	1.70	1.75	2.00	6.4	0.177	M

Electrical Characteristics

TNR8040 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR8040S-510MTF	51	1.50	1.60	1.70	1.90	6.4	0.185	M
TNR8040S-560MTF	56	1.45	1.60	1.55	1.70	6.4	0.192	M
TNR8040S-620MTF	62	1.30	1.40	1.50	1.60	6.4	0.237	M
TNR8040S-680MTF	68	1.25	1.40	1.45	1.60	4.9	0.255	M
TNR8040S-750MTF	75	1.20	1.30	1.35	1.50	4.9	0.274	M
TNR8040S-820MTF	82	1.15	1.20	1.30	1.40	5.9	0.293	M
TNR8040S-910MTF	91	1.05	1.10	1.20	1.30	4.9	0.354	M
TNR8040S-101MTF	100	1.00	1.10	1.15	1.30	4.2	0.377	M
TNR8040S-121MTF	120	0.95	1.00	1.05	1.10	3.5	0.434	M
TNR8040S-151MTF	150	0.85	0.94	1.10	1.20	3.5	0.533	M
TNR8040S-181MTF	180	0.83	0.92	0.95	1.15	3.5	0.676	M
TNR8040S-221MTF	220	0.80	0.88	0.85	0.94	3.5	0.779	M
TNR8040S-331MTF	330	0.64	0.70	0.68	0.75	2.8	1.156	M
TNR8040S-471MTF	470	0.50	0.60	0.60	0.70	2.1	1.625	M

TNR8065 Series

Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR8065S-R68MTF	0.68	7.50	8.50	24.00	26.00	100	0.008	M
TNR8065S-1R0MTF	1	7.00	8.00	20.00	22.00	96	0.011	M
TNR8065S-2R2MTF	2.2	5.20	4.50	13.80	12.00	45	0.016	M
TNR8065S-3R3MTF	3.3	5.10	5.90	9.50	10.00	27	0.018	M
TNR8065S-4R7MTF	4.7	4.70	5.40	8.50	9.50	18	0.022	M
TNR8065S-5R6MTF	5.6	4.50	5.20	8.00	9.00	17	0.026	M
TNR8065S-6R8MTF	6.8	4.50	5.20	7.50	8.00	16	0.026	M
TNR8065S-8R2MTF	8.2	4.20	4.80	7.00	7.70	15	0.031	M
TNR8065S-100MTF	10	3.20	3.70	8.00	8.90	13	0.044	M
TNR8065S-150MTF	15	3.25	3.75	5.70	6.70	10	0.053	M
TNR8065S-220MTF	22	2.70	3.10	4.30	4.80	8	0.072	M
TNR8065S-470MTF	47	1.85	2.15	3.40	3.70	7	0.152	M
TNR8065S-560MTF	56	1.35	1.55	3.20	3.70	6	0.198	M
TNR8065S-680MTF	68	1.55	1.80	2.70	3.20	5	0.218	M
TNR8065S-101MTF	100	1.35	1.45	2.00	2.40	3.1	0.280	M
TNR8065S-151MTF	150	0.95	1.10	1.60	2.00	2.5	0.440	M
TNR8065S-221MTF	220	0.80	0.90	1.20	1.50	2	0.656	M
TNR8065S-331MTF	330	0.75	0.85	1.00	1.20	1.7	0.840	M
TNR8065S-471MTF	470	0.55	0.65	1.00	1.20	1.4	1.560	M

Electrical Characteristics

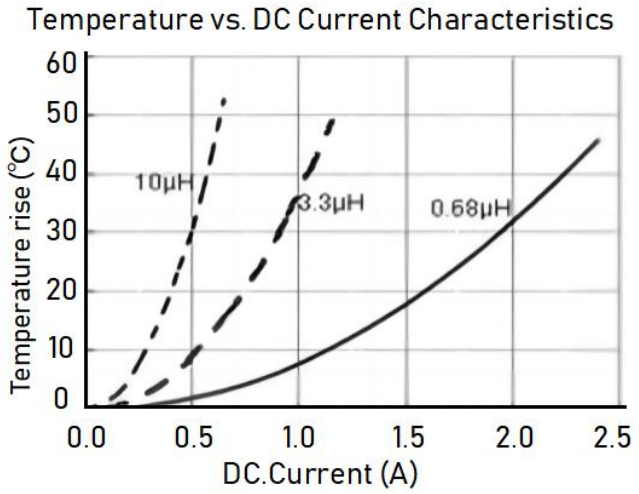
● TNR8065 Series

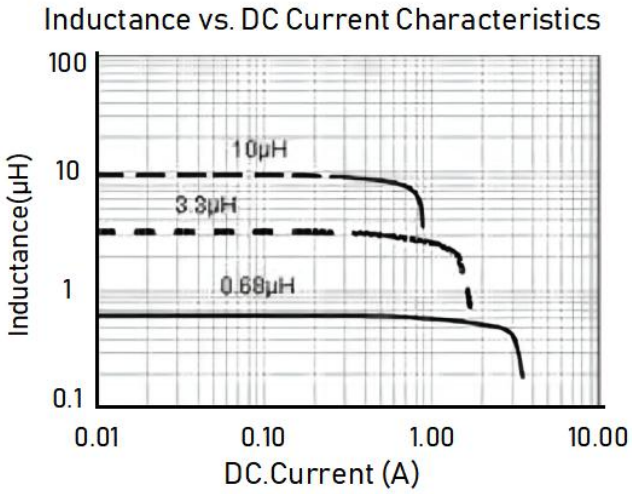
Part Number	Inductance	Heat Rating Current		Saturation Current		Self-resonant Frequency	DC Resistance	Inductance Tolerance
	@100kHz,1V	Max.	Typ.	Max.	Typ.	Min.	Max.	M=±20% N=±30%
Units	μH	A		A		MHz	Ω	
Symbol	L	Irms		Isat		S.R.F	DCR	
TNR8065S-681MTF	680	0.52	0.60	0.85	1.00	1	1.944	M
TNR8065S-102MTF	1000	0.40	0.45	0.65	0.73	1.1	2.820	M

△1: All test data is referenced to 20°C ambient;
△2: Rated current: Isat or Irms, whichever is smaller;
△3: Irms: DC current that causes the temperature rise (△T =40°C) from 20°C ambient.

TYPICAL ELECTRICAL CHARACTERISTICS

TNR252010 Series

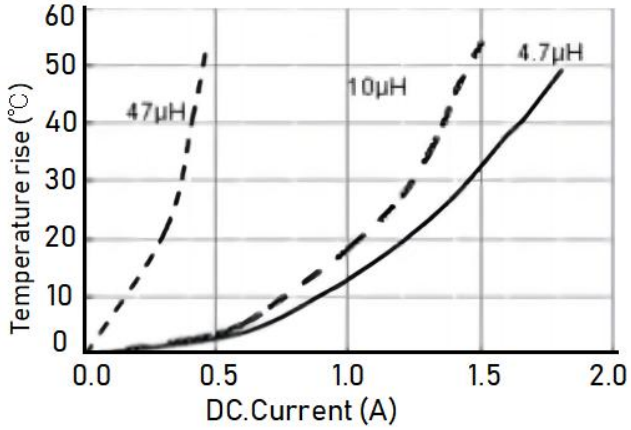




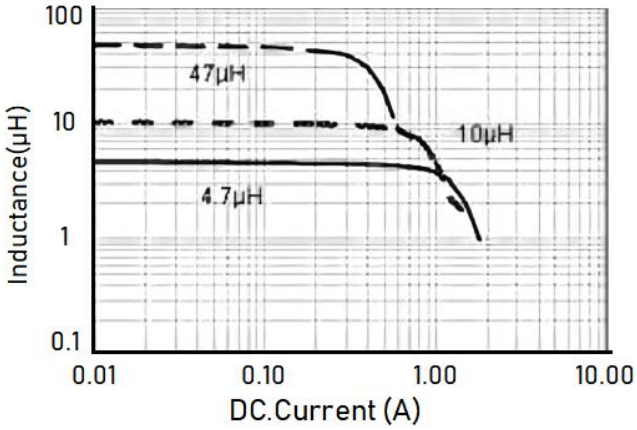
TYPICAL ELECTRICAL CHARACTERISTICS

TNR252012 Series

Temperature vs. DC Current Characteristics

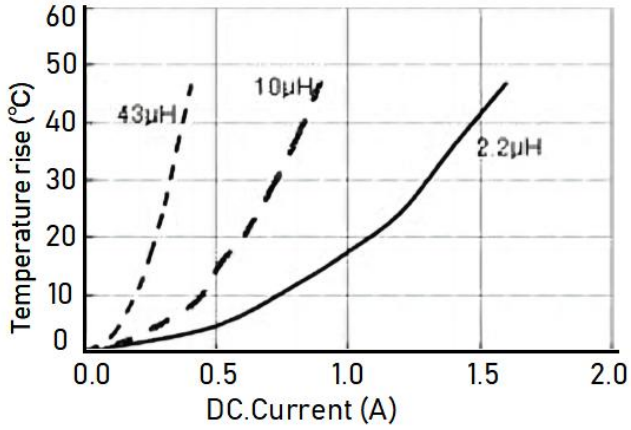


Inductance vs. DC Current Characteristics

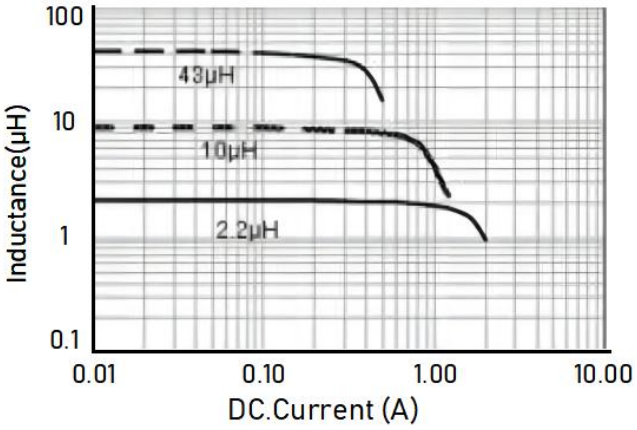


TNR3010 Series

Temperature vs. DC Current Characteristics

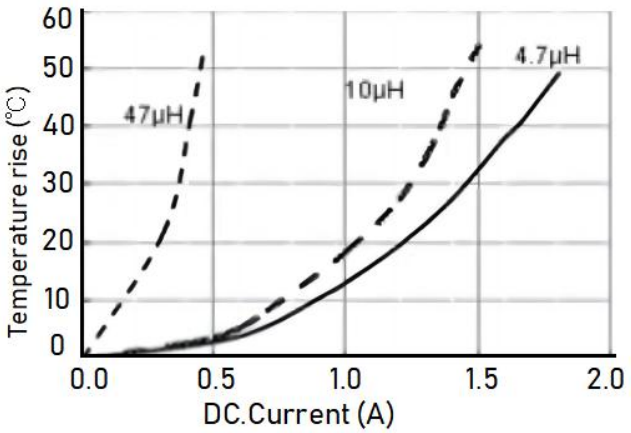


Inductance vs. DC Current Characteristics

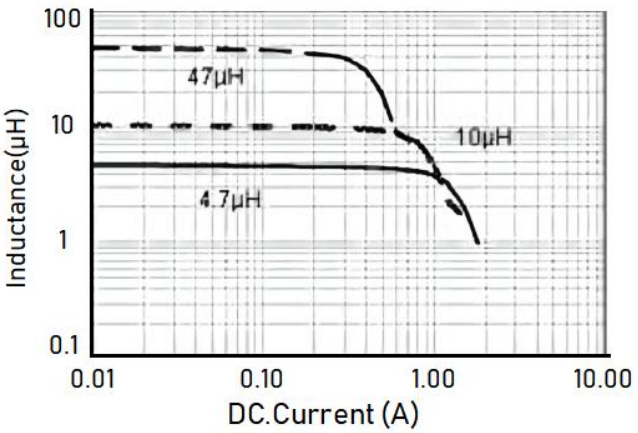


TNR3012 Series

Temperature vs. DC Current Characteristics



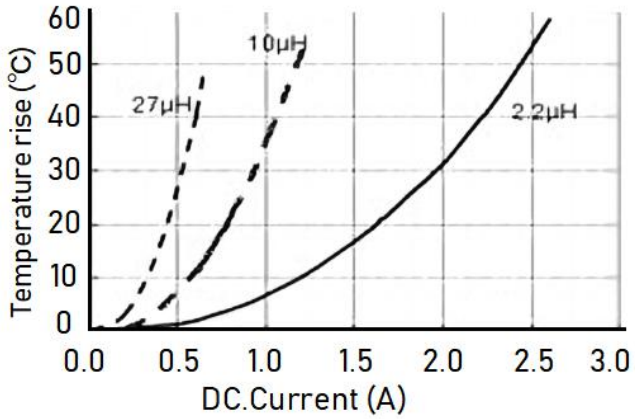
Inductance vs. DC Current Characteristics



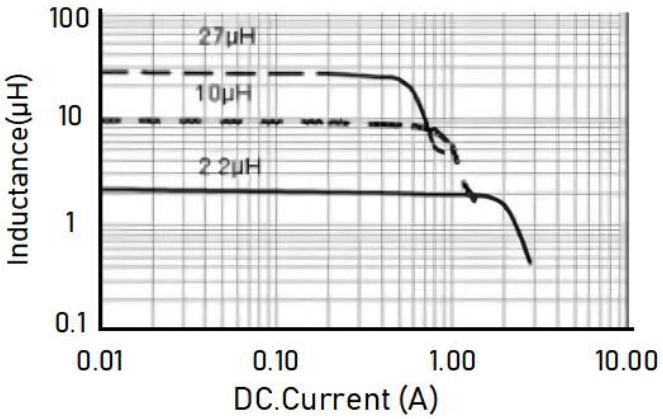
TYPICAL ELECTRICAL CHARACTERISTICS

TNR3015 Series

Temperature vs. DC Current Characteristics

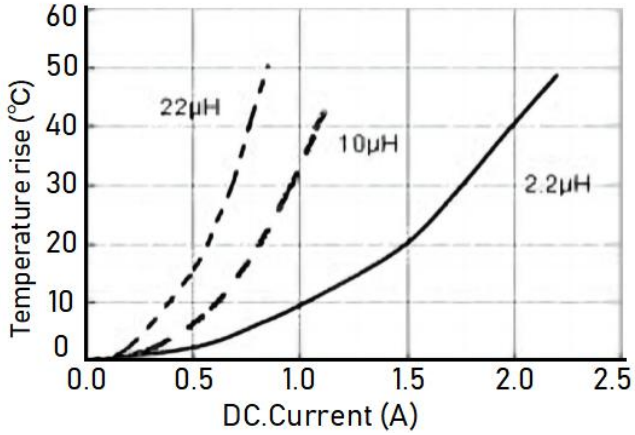


Inductance vs. DC Current Characteristics

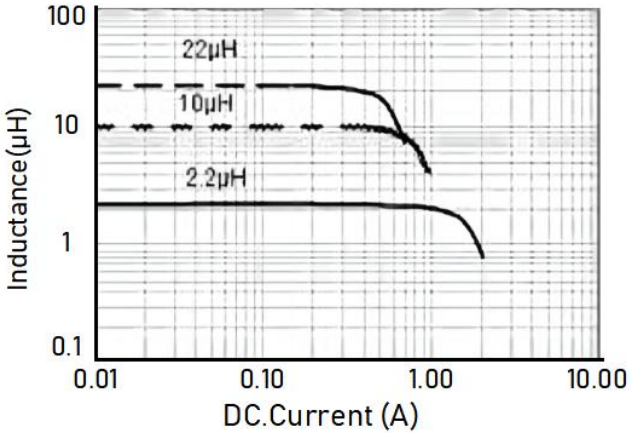


TNR4010 Series

Temperature vs. DC Current Characteristics

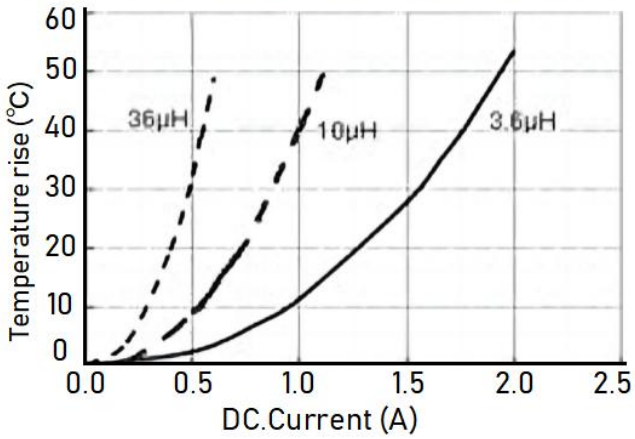


Inductance vs. DC Current Characteristics

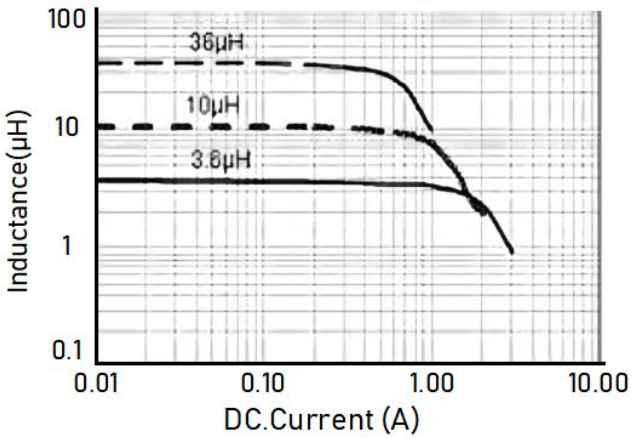


TNR4012 Series

Temperature vs. DC Current Characteristics



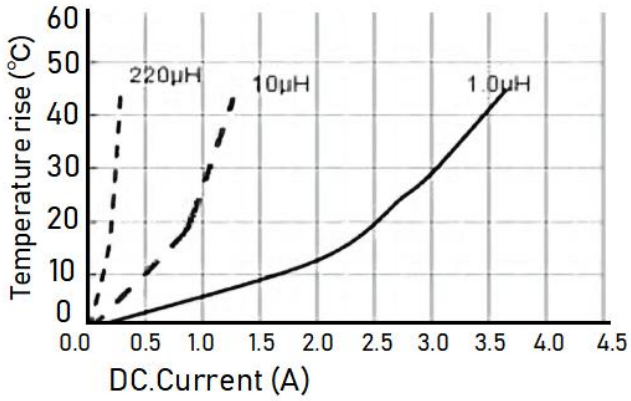
Inductance vs. DC Current Characteristics



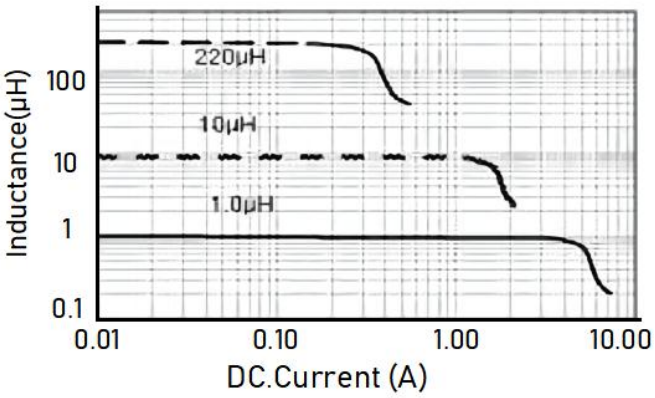
TYPICAL ELECTRICAL CHARACTERISTICS

TNR4018 Series

Temperature vs. DC Current Characteristics

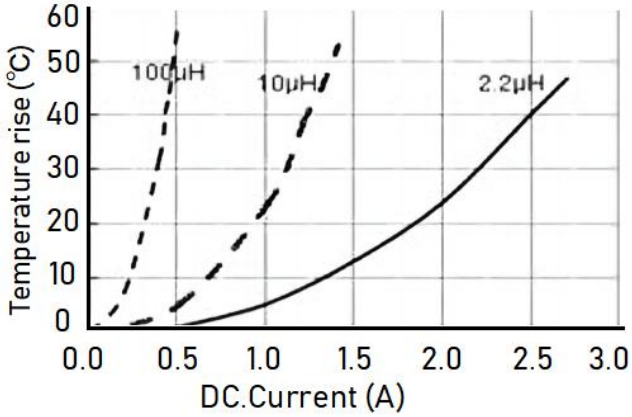


Inductance vs. DC Current Characteristics

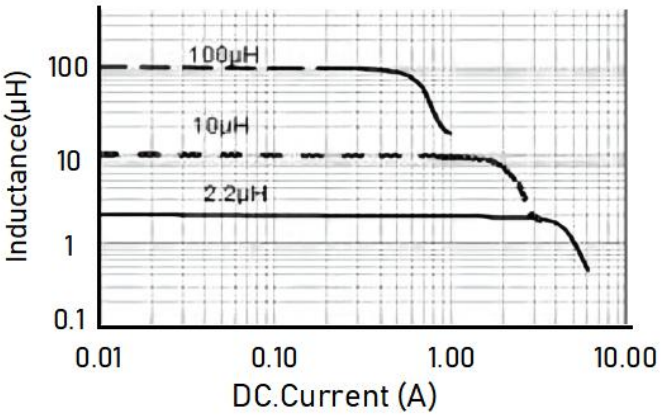


TNR4020 Series

Temperature vs. DC Current Characteristics

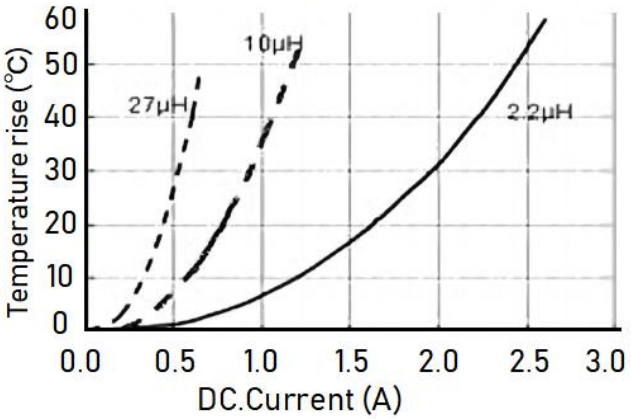


Inductance vs. DC Current Characteristics

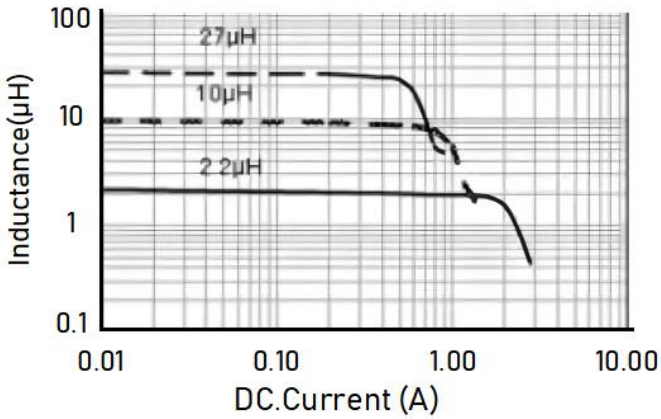


TNR4030 Series

Temperature vs. DC Current Characteristics



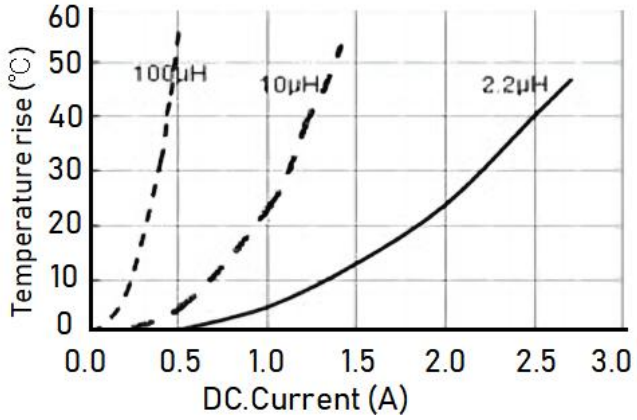
Inductance vs. DC Current Characteristics



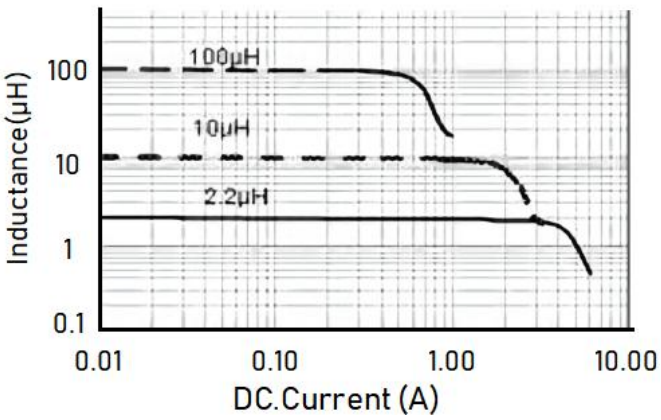
TYPICAL ELECTRICAL CHARACTERISTICS

TNR5012 Series

Temperature vs. DC Current Characteristics

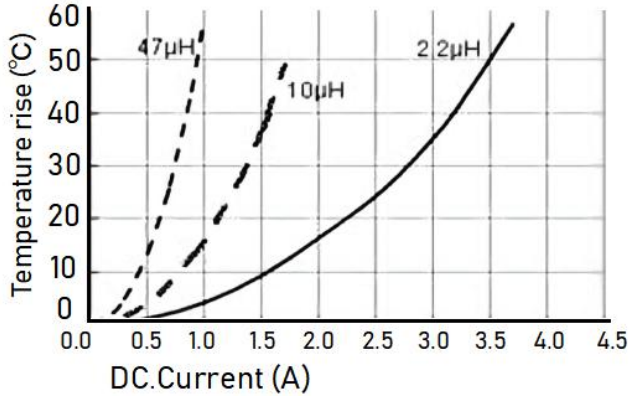


Inductance vs. DC Current Characteristics

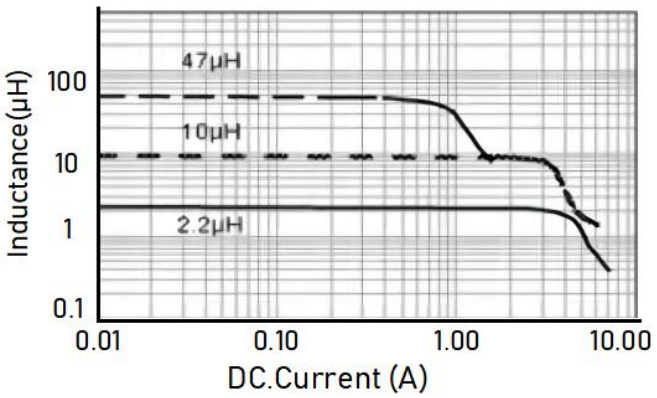


TNR5020 Series

Temperature vs. DC Current Characteristics

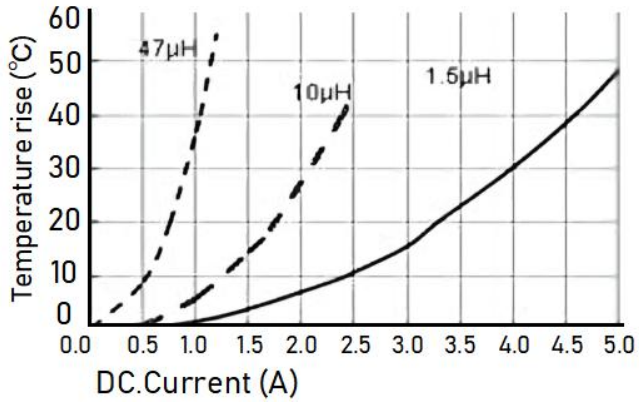


Inductance vs. DC Current Characteristics

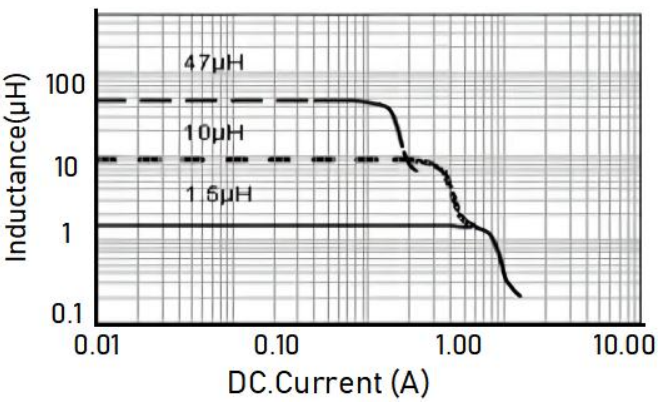


TNR5040 Series

Temperature vs. DC Current Characteristi



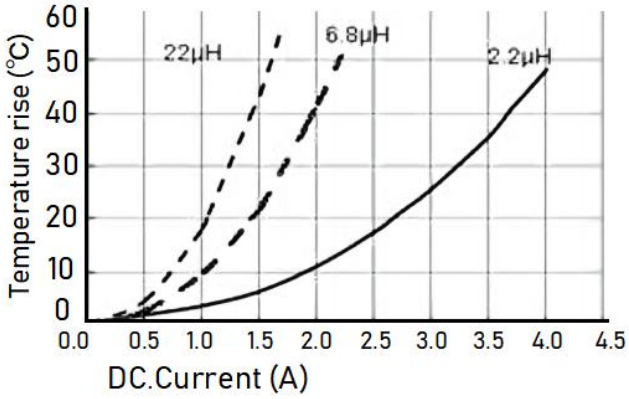
Inductance vs. DC Current Characteristics



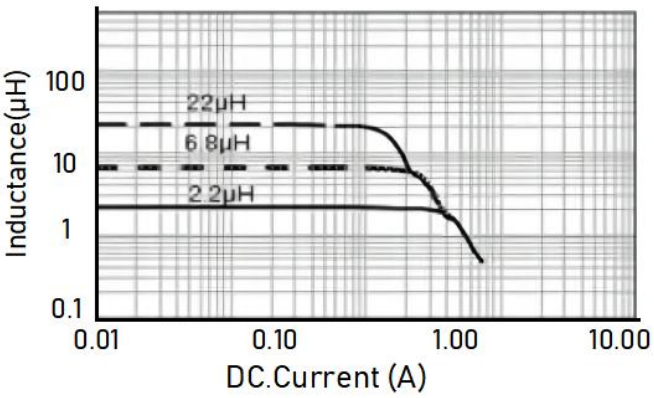
TYPICAL ELECTRICAL CHARACTERISTICS

TNR6020 Series

Temperature vs. DC Current Characteristics

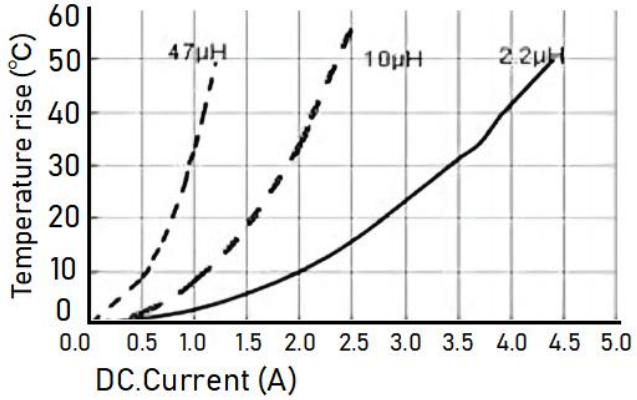


Inductance vs. DC Current Characteristics

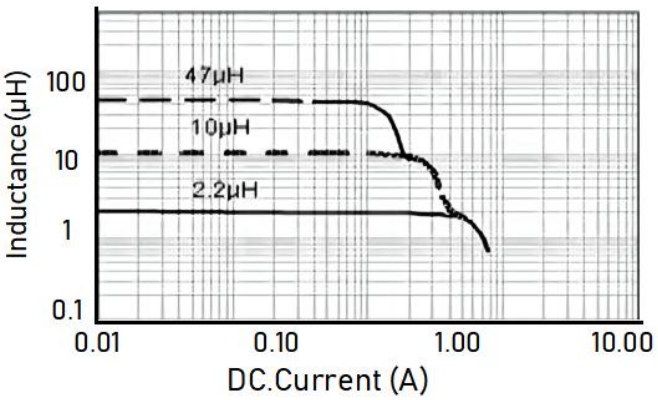


TNR6028 Series

Temperature vs. DC Current Characteristi

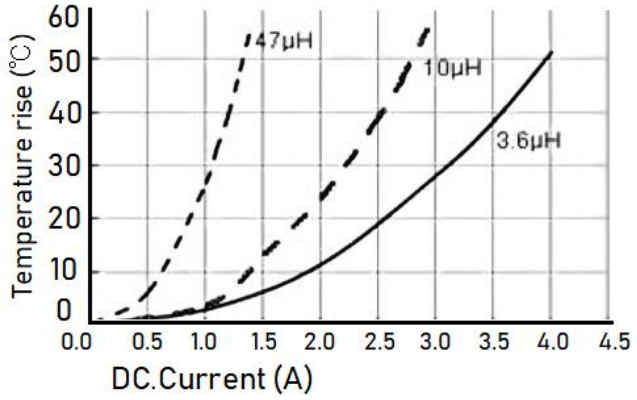


Inductance vs. DC Current Characteristics

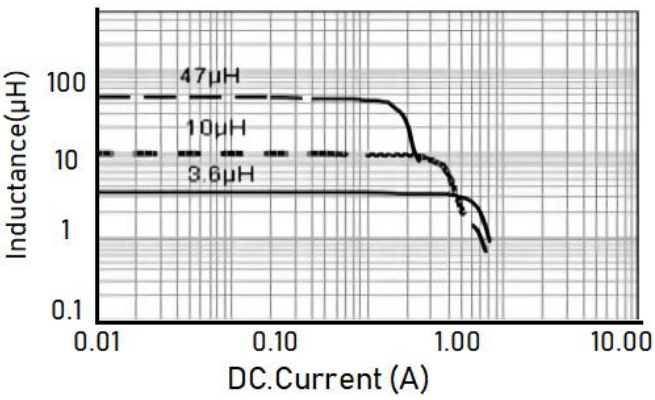


TNR6045 Series

Temperature vs. DC Current Characteristics



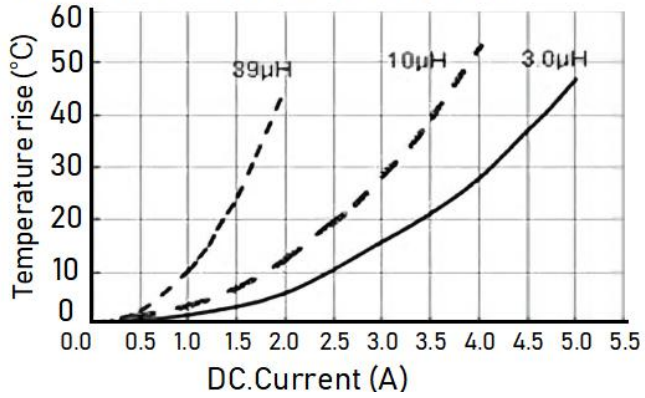
Inductance vs. DC Current Characteristics



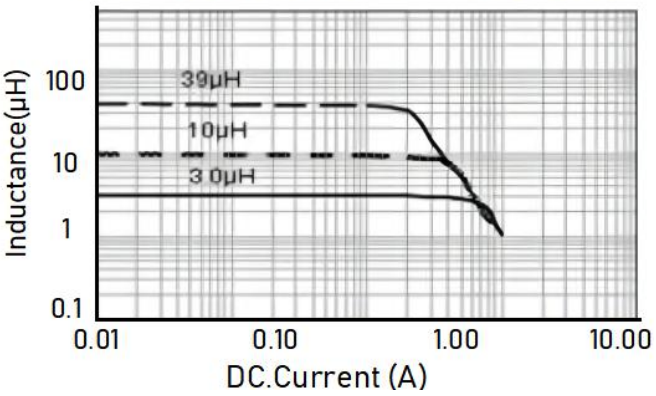
TYPICAL ELECTRICAL CHARACTERISTICS

TNR8040 Series

Temperature vs. DC Current Characteri

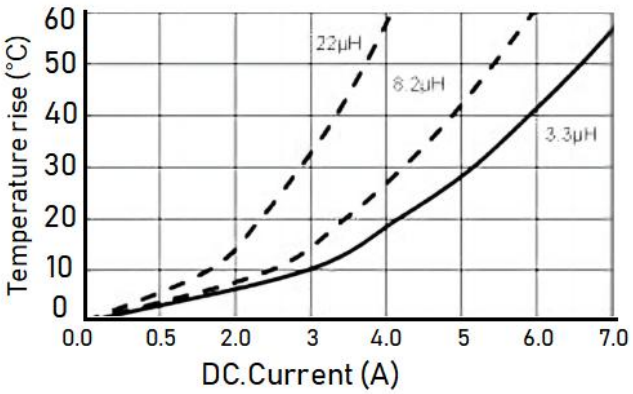


Inductance vs. DC Current Characteristics

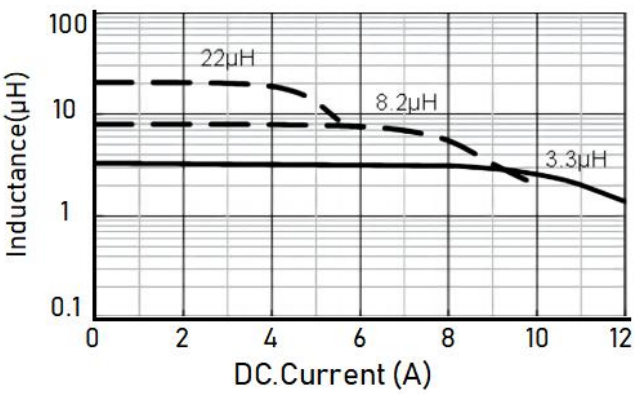


TNR8065 Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



Note:
This series product is not applies in automotive or related products. Otherwise, we will shall not bear than the resulting all the problems of quality and responsibility.

Please be sure to request approval specifications that provide further details of the products. Kindly not that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without APV approval.