

DS Series



DS series is designed for low RDC and ultra large current application. Its assembly model magnetic shielded type is suitable for high-density mounting and ultra low buzz noise. Soldering conditions can be easily confirmed when mounting onto the board. This series also provides customers with embossed carrier type packaging for automatic mounting machine.

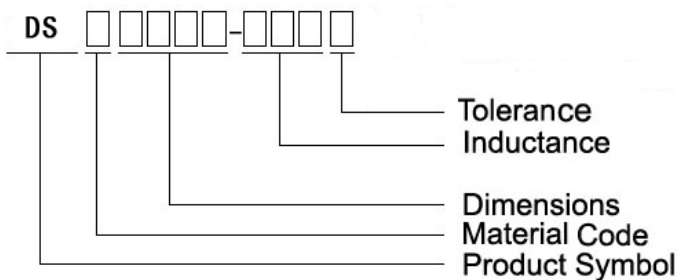
Features

- The products contain no Halogen Free and also support Halogen Free products
- Excellent for power line DC-DC conversion applications
- Shielded construction
- Lowest DCR/ uH, in this package series
- Handle high transient current spikes without saturation
- Ultra low buzz noise, due to composite construction

Applications

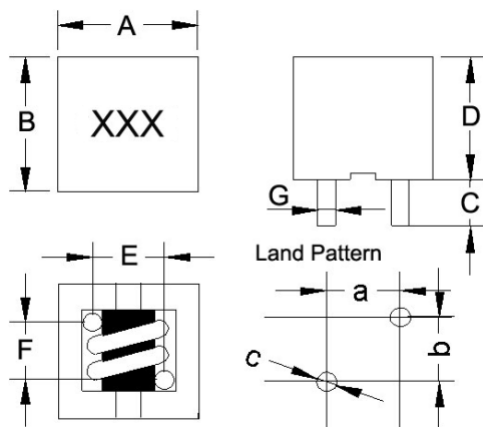
- Excellent for power line DC-DC conversion applications used in power switching, personal computers and other handheld electronic equipment

Product Identification



Shapes and Dimensions

FIG 1



Dimensions in mm

FIG 2

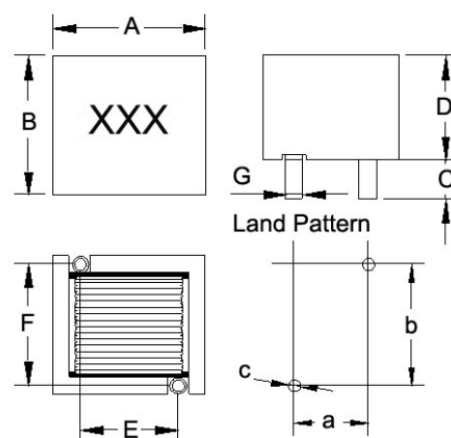


figure 2:

DSI 1210-101M

DSI 1210-121M

DSI 1210-221M

TYPE	A	B	C	D	E	F	G	a	b	c
DSI 0806N	8.2 ⁺⁰	8.2 ⁺⁰	3.5±0.5	7.0 ⁺⁰	4.4±0.5	4.5±0.5	0.7±0.1	4.9	5.0	1.0
DSI 0808N	8.2 ⁺⁰	8.2 ⁺⁰	3.5±0.5	9.5 ⁺⁰	4.5±0.5	4.0±0.5	0.7±0.1	5.0	4.5	0.9
DSI 1008N	11.7 ⁺⁰	9.7 ⁺⁰	3.5±0.5	9.5 ⁺⁰	7.0±0.5	4.7±0.5	1.1±0.1	7.5	5.2	1.2
DSI 1009N	11.0 ⁺⁰	11.0 ⁺⁰	3.4±0.5	10.0 ⁺⁰	6.0±0.5	4.5±0.5	1.4±0.1	6.5	5.0	1.8
DSI 1108N	11.5 ⁺⁰	11.5 ⁺⁰	3.4±0.5	9.5 ⁺⁰	6.8±0.5	6.8±0.5	1.0±0.1	7.3	7.3	1.4
DSI 1208N	11.7 ⁺⁰	11.7 ⁺⁰	3.4±0.5	8.0 ⁺⁰	7.1±0.5	6.4±0.5	1.1±0.1	7.6	6.9	1.2
DSI 1210N	11.7 ⁺⁰	11.7 ⁺⁰	3.4±0.5	10.0 ⁺⁰	7.0±0.5	6.0±0.5	1.5±0.1	7.5	6.5	1.9

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance (\pm %)	Test Frequency (KHz)	RDC (m Ω)Max	Isat (A) Typ	Irms (A) Typ
DSI 0806 -R25M	0.25	20	100	1.20	30	28
DSI 0806 -R47M	0.47	20	100	2.00	20	20
DSI 0806 -R80M	0.80	20	100	3.00	20	18
DSI 0806 -1R0M	1.00	20	100	4.30	18	15
DSI 0806 -1R2M	1.20	20	100	3.00	20	18
DSI 0806 -2R2M	2.20	20	100	4.50	8.0	13
DSI 1008 -R50M	0.50	20	100	0.87	35	30
DSI 1008 -1R0M	1.00	20	100	2.00	40	18
DSI 1108 -R25M	0.25	20	100	1.20	30	28
DSI 1108 -R30M	0.30	20	100	1.20	30	28
DSI 1108 -R60M	0.60	20	100	1.07	38	26
DSI 1108 -1R0M	1.0	20	100	1.30	35	31
DSI 1108 -2R5M	2.5	20	100	4.70	24	18
DSI 1108 -5R0M	5.0	20	100	9.20	16	10
DSI 1210 -R30M	0.30	20	100	0.80	40	38
DSI 1210 -R50M	0.50	20	100	1.12	40	35
DSI 1210 -R68M	0.68	20	100	0.80	40	35
DSI 1210 -1R0M	1.00	20	100	1.30	30	25
DSI 1210 -2R5M	2.50	20	100	5.00	24	14
DSI 1210 -3R0M	3.00	20	100	6.30	20	14
DSI 1210 -8R5M	8.50	20	100	19.6	11	7.0
DSI 1210 -100M	10.0	20	100	19.5	11	7.0

- Isat for inductance drops 20% from its value without current
- Irms for a 40°C rise above 25°C ambient.
- Customized Specifications are welcome.
- Tested L: WK4237METER
RDC: HK502BC METER
Isat、Irms : WK3260B/ 3265B METER

Electrical Characteristics

Part Number	Inductance (μ H)	Tolerance (\pm %)	Test Frequency (KHz)	RDC (m Ω) Max	Isat (A) Typ	Irms (A) Typ
DSN0808 -R47M	0.47	20	100	2.0	20	18
DSN0808 -1R0M	1.00	20	100	3.5	15	14
DSN0808 -1R2M	1.20	20	100	1.7	15	18
DSN0808 -2R2M	2.20	20	100	8.0	15	10
DSN0808 -4R7M	4.70	20	100	18.6	10.5	7.5
DSN0808 -100M	10.0	20	100	53	3.0	4.2
DSN0808 -150M	15.0	20	100	65	3.0	2.0
DSN0808 -330M	33.0	20	100	110	4.0	3.0
DSN1008 -R22M	0.22	20	100	0.75	40	32
DSN1008 -R36M	0.36	20	100	0.75	30	30
DSN1008 -1R0M	1.00	20	100	1.21	20	30
DSN1009 -R30M	0.30	20	100	0.65	50	36
DSN1009 -R50M	0.50	20	100	0.78	30	30
DSN1009 -1R0M	1.00	20	100	1.8	24	28
DSN1009 -1R2M	1.20	20	100	2.5	10	10
DSN1009 -150M	15.0	20	100	51.6	1.8	4
DSN1009 -121M	120	20	100	280	1.5	1
DSN1208 -R25M	0.25	20	100	0.80	50	38
DSN1208 -R47M	0.47	20	100	1.0	35	28
DSN1208 -1R0M	1.00	20	100	1.3	35	31
DSN1208 -2R0M	2.00	20	100	3.2	25	20
DSN1208 -3R3M	3.00	20	100	6.3	25	14
DSN1210 -R25M	0.25	20	100	0.6	60	40
DSN1210 -R47M	0.47	20	100	0.8	50	35
DSN1210 -1R0M	1.00	20	100	1.45	40	35
DSN1210 -1R2M	1.20	20	100	2.7	30	25
DSN1210 -1R8M	1.80	20	100	3.7	15	13
DSN1210 -2R2M	2.20	20	100	3.2	20	18
DSN1210 -4R7M	4.70	20	100	6.5	18	14
DSN1210 -121M	120	20	100	240	2	2.2

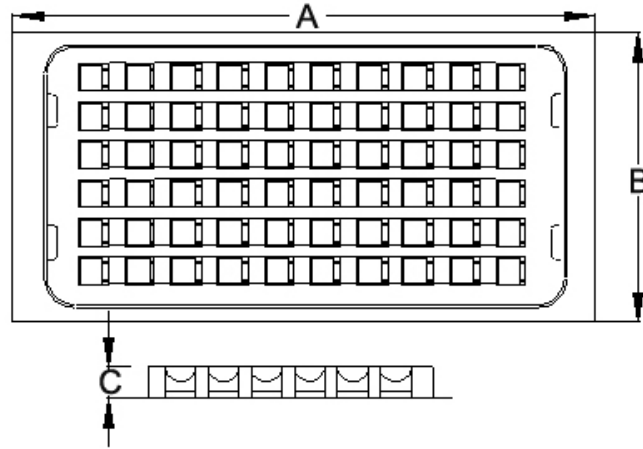
- Isat for inductance drops 20% from its value without current
- I rms for a 40°C rise above 25°C ambient.
- Customized Specifications are welcome.
- Tested L: WK4237METER

RDC: HK502BC METER

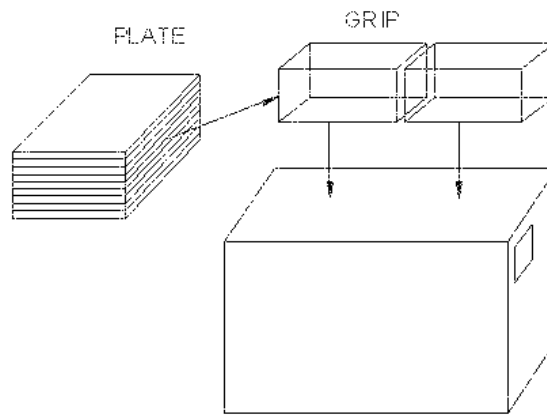
Isat 、 I rms : WK3260B/ 3265B METER

Packaging

PLATE DIMENSIONS



PACKAGING QUANTITY



Dimensions in mm

TYPE	PLATE DIMENSIONS			QUANTITY				
	A	B	C	BULK	PLATE	PLATE/GRIP	GRIP	BOX
DSI 0806N	250	220	10	✓	100	10	2	2000
DSI 0808N	250	220	10	✓	100	10	2	2000
DSI 1008N	250	200	10	✓	100	10	2	2000
DSI 1009N	250	200	13.5	✓	100	8	2	1600
DSI 1108N	250	200	13.5	✓	100	8	2	1600
DSI 1208N	250	200	13.5	✓	100	8	2	1600
DSI 1210N	250	200	13.5	✓	100	8	2	1600