

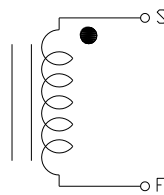
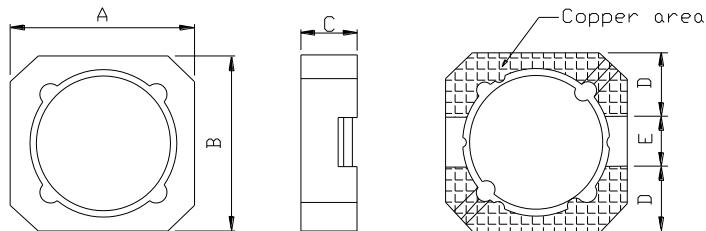
# ISDC Series

Shielded Power Inductors

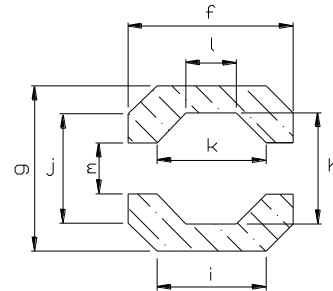
**TRIGON**  
COMPONENTS



## Configurations:



SCHEMATIC



RECOMMENDED LAND PATTERN

Inductor

## FEATURES

- Magnetically shielded construction.
- Low Profile.
- Low DCR
- High Current
- High Inductance Values
- RoHS Compliant.

## APPLICATION

- LCD Driver, Cellular Phone,
- Backlight applications,
- Small DC/DC Converters
- EL and LED Backlight Drivers, and more.

## ORDERING CODE

**ISDC3010** **M** **220** **T**  
(1) (2) (3) (4)

(1) Shielded Power Inductors

(2) Tolerance Code:  
M: 20%  
N: 30%

(3) Inductance

(4) Package

※Please refer to complete Ordering Code document (ISDC-Ord) for more ordering options.

## Dimension (mm)

Item	A	B	C	D (typ)	E (typ)	f (ref)	g (ref)	h (ref)	i (ref)	j (ref)	k (ref)	l (ref)	m (ref)
ISDC3010	3.0±0.2	3.0±0.2	1.0max	0.9	1.2	3.05	3.3	1.78	2.54	2.79	1.65	1.02	1.02
ISDC3012	3.0±0.2	3.0±0.2	1.2max	0.9	1.2	3.05	3.3	1.78	2.54	2.79	1.65	1.02	1.02
ISDC3015	3.0±0.2	3.0±0.2	1.5max	0.9	1.2	3.05	3.3	1.78	2.54	2.79	1.65	1.02	1.02
ISDC3020	3.0±0.2	3.0±0.2	2.0max	0.9	1.2	3.05	3.3	1.78	2.54	2.79	1.65	1.02	1.02
ISDC3030	3.0±0.2	3.0±0.2	3.0max	0.9	1.2	3.05	3.3	1.78	2.54	2.79	1.65	1.02	1.02
ISDC4015	4.0±0.2	4.0±0.2	1.5max	1.1	1.8	4.05	4.4	2.66	2.79	3.28	2.5	1.15	1.5
ISDC4020	4.0±0.2	4.0±0.2	2.0max	1.1	1.8	4.05	4.4	2.66	2.79	3.28	2.5	1.15	1.5
ISDC4030	4.0±0.2	4.0±0.2	3.0max	1.1	1.8	4.05	4.4	2.66	2.79	3.28	2.5	1.15	1.5
ISDC5010	5.0±0.2	5.0±0.2	1.0max	1.75	1.5	5.51	5.51	3.4	3.4	3.4	3.4	1.69	1.52
ISDC5015	5.0±0.2	5.0±0.2	1.5max	1.75	1.5	5.51	5.51	3.4	3.4	3.4	3.4	1.69	1.52
ISDC5020	5.0±0.2	5.0±0.2	2.0max	1.75	1.5	5.51	5.51	3.4	3.4	3.4	3.4	1.69	1.52
ISDC5020W	5.0±0.2	5.0±0.2	2.0max	1.75	1.5	5.51	5.51	3.4	3.4	3.4	3.4	1.69	1.52
ISDC5030	5.0±0.2	5.0±0.2	3.0max	1.75	1.5	5.51	5.51	3.4	3.4	3.4	3.4	1.69	1.52
ISDC5035	5.0±0.2	5.0±0.2	3.5max	1.75	1.5	5.51	5.51	3.4	3.4	3.4	3.4	1.69	1.52
ISDC6020	6.0±0.2	6.0±0.2	2.0max	2.0	2.0	6.60	6.60	4.20	4.25	4.25	4.20	1.8	2.0
ISDC6030	6.0±0.2	6.0±0.2	3.0max	2.0	2.0	6.60	6.60	4.20	4.25	4.25	4.20	1.8	2.0
ISDC6035	6.0±0.2	6.0±0.2	3.5max	2.0	2.0	6.60	6.60	4.20	4.25	4.25	4.20	1.8	2.0

# ISDC Series

## Shielded Power Inductors

**TRIGON**  
COMPONENTS

Electrical Characteristics for: ISDC3010, ISDC3012, ISDC3015, ISDC3020, ISDC3030, ISDC4015, ISDC4020 Series.

Part Number	Inductance ( $\mu$ H)	Test Freq. ( MHz )	DCR ( $\Omega$ ) (max)	IDC (A) (max)
ISDC3010M1R0T	1.0 $\pm$ 20%	0.1	0.085	1.6
ISDC3010M1R8T	1.8 $\pm$ 20%	0.1	0.150	1.2
ISDC3010M2R2T	2.2 $\pm$ 20%	0.1	0.220	1.1
ISDC3010N3R3T	3.3 $\pm$ 30%	1	0.220	0.82
ISDC3010M4R7T	4.7 $\pm$ 20%	0.1	0.330	0.72
ISDC3010M220T	22 $\pm$ 20%	0.1	1.20	0.33
ISDC3010M330T	33 $\pm$ 20%	0.1	2.00	0.27
ISDC3012MR33T	0.33 $\pm$ 30%	0.1	35m	2.8
ISDC3012MR68T	0.68 $\pm$ 20%	0.1	50m	2.1
ISDC3012N2R2T	2.2 $\pm$ 30%	0.1	0.15	1.3
ISDC3012N3R3T	3.3 $\pm$ 30%	1	0.14 $\pm$ 20%	1.1
ISDC3012M220T	22 $\pm$ 20%	0.1	1.2	0.4
ISDC3015NR11T	0.11 $\pm$ 30%	0.1	11m	5.5
ISDC3015M1R0T	1.0 $\pm$ 20%	0.1	0.075	2.0
ISDC3015M1R5T	1.5 $\pm$ 20%/30%	0.1	0.1	1.8
ISDC3015M2R2T	2.2 $\pm$ 20%/ $\pm$ 30%	0.1	0.11	1.5
ISDC3015M3R3T	3.3 $\pm$ 20%/ $\pm$ 30%	0.1	0.13	1.3
ISDC3015M4R7T	4.7 $\pm$ 20%	0.1	0.2	1.1
ISDC3015M100T	10.0 $\pm$ 20%	0.1	0.44	0.65
ISDC3015M150T	15.0 $\pm$ 20%	0.1	0.7	0.55
ISDC3015M220T	22.0 $\pm$ 20%	0.1	0.825	0.49
ISDC3015M101T	100.0 $\pm$ 20%	0.1	3.4	0.23
ISDC3020M2R2T	2.2 $\pm$ 20%	0.1	80m	2.0
ISDC3020M3R3T	3.3 $\pm$ 20%	0.1	0.1	1.8
ISDC3030M2R2T	2.2 $\pm$ 20%	0.1	66m	2.4
ISDC3030M3R3T	3.3 $\pm$ 20%	0.1	95m	2.0
ISDC3030M4R7T	4.7 $\pm$ 20%	0.1	0.1	2.0
ISDC4015M3R3T	3.3 $\pm$ 20%	0.1	60m $\pm$ 20%	1.8
ISDC4020M1R8T	1.8 $\pm$ 30%	0.1	51m	1.97
ISDC4020M2R2T	2.2 $\pm$ 30%	0.1	59m	1.72
ISDC4020M4R7T	4.7 $\pm$ 20%/ $\pm$ 30%	0.1	98m	1.24

- ※ Inductance drop  $\leq$ 30% at IDC
- ※ Irms: Inductance rise 40C typ
- ※ Operating Temperature: -40C~+85C

# ISDC Series

## Shielded Power Inductors

**TRIGON**  
COMPONENTS

Electrical Characteristics for: ISDC4030, ISDC5010, ISDC5015, ISDC5020, ISDC5020W Series.

Part Number	Inductance ( $\mu$ H)	Test Freq. ( MHz )	DCR ( $\Omega$ ) (max)	IDC (A) (max)
ISDC4030N1R0T	1.0 $\pm$ 30%	0.1	20m	2.8
ISDC4030N1R2T	1.2 $\pm$ 30%	0.1	25m	2.65
ISDC4030N2R2T	2.2 $\pm$ 30%	0.1	35m	2.3
ISDC4030M4R7T	4.7 $\pm$ 20%	0.1	55m	2.0
ISDC4030M6R8T	6.8 $\pm$ 20%	0.1	78m	1.5
ISDC4030M101T	100 $\pm$ 20%	0.1	1.5	0.4
ISDC4030M151T	150 $\pm$ 20%	0.1	2.4	0.3
ISDC4030M471T	470 $\pm$ 20%	0.1	5.5	0.14
ISDC4030M102T	1000 $\pm$ 20%	0.1	9.0	0.12
ISDC5010M100T	10 $\pm$ 20%	0.1	0.35	0.68
ISDC5015N2R2T	2.2 $\pm$ 30%	0.1	90m	2.6
ISDC5015M3R3T	3.3 $\pm$ 20%	0.1	0.125	1.8
ISDC5015M4R7T	4.7 $\pm$ 20%	0.1	0.15	1.62
ISDC5015M100T	10 $\pm$ 20%	0.1	0.3	0.95
ISDC5015M220T	22 $\pm$ 20%	0.1	0.675	0.82
ISDC5020NR33T	0.33 $\pm$ 30%	0.1	10.65m	5.8
ISDC5020N1R0T	1.0 $\pm$ 30%	0.1	24.55m	3.5
ISDC5020N1R5T	1.5 $\pm$ 30%	0.1	35m	3.2
ISDC5020M2R2T	2.2 $\pm$ 20%/ $\pm$ 30%	0.1	55m	2.7
ISDC5020M3R3T	3.3 $\pm$ 20%/ $\pm$ 30%	0.1	65m	2.4
ISDC5020M4R7T	4.7 $\pm$ 20%/ $\pm$ 30%	0.1	80m	2.1
ISDC5020M100T	10 $\pm$ 20%	0.1/1	0.15	1.4
ISDC5020M150T	15 $\pm$ 20%	0.1	0.27	1.1
ISDC5020M220T	22 $\pm$ 20%	0.1	0.35	0.78
ISDC5020WM3R3T	3.3 $\pm$ 20%	0.1	35m $\pm$ 20%	3.0

- ※ Inductance drop $\leq$  30% at IDC
- ※ Irms: Inductance rise 40°C typ
- ※ Operating Temperature: -40°C~+85°C

# ISDC Series

## Shielded Power Inductors

**TRIGON**  
COMPONENTS

Electrical Characteristics for: ISDC5030, SDC5035, ISDC6020, ISDC6030, ISDC6035 Series.

Part Number	Inductance ( $\mu\text{H}$ ) $\pm 20\%$	Test Freq. ( MHz )	DCR ( $\Omega$ ) (max)	IDC (A) (max)
ISDC5030M3R3T	3.3 $\pm 20\%$	0.1	66m	2.5
ISDC5030M4R7T	4.7 $\pm 20\%$	0.1	83m	2.0
ISDC5030N6R8T	6.8 $\pm 30\%$	0.1	99m	2.0
ISDC5030M220T	22 $\pm 20\%$	0.1	0.19	1.0
ISDC5030M270T	27 $\pm 20\%$	0.1	0.27	0.9
ISDC5030M330T	33 $\pm 20\%$	0.1	0.35	0.8
ISDC5030M470T	47 $\pm 20\%$	0.1	0.5	0.75
ISDC5030M560T	56 $\pm 20\%$	0.1	0.65	0.65
ISDC5030M680T	68 $\pm 20\%$	0.1	0.75	0.6
ISDC5030M221T	220 $\pm 20\%$	0.1	1.45	0.2
ISDC5030M331T	330 $\pm 20\%$	0.1	1.8	0.17
ISDC5035M4R7T	4.7 $\pm 20\%$	0.1	45m	3.0
ISDC5035M6R8T	6.8 $\pm 20\%$	0.1	55m	3.0
ISDC6020N1R8T	1.8 $\pm 30\%$	0.1	37.5m	3.0
ISDC6020M6R8T	6.8 $\pm 20\%$	0.1	85m	1.9
ISDC6020M150T	15 $\pm 20\%$	0.1	0.22	1.1
ISDC6030N1R0T	1.0 $\pm 30\%$	0.1	13.85m	4.2
ISDC6030N1R5T	1.5 $\pm 30\%$	0.1	19m	4.3
ISDC6030M4R7T	4.7 $\pm 20\%$	0.1	45m	3.3
ISDC6030N5R0T	5.0 $\pm 30\%$	0.1	45m	3.3
ISDC6030M100T	10 $\pm 20\%$	0.1	85m	2.2
ISDC6030M150T	15 $\pm 20\%$	0.1	95m $\pm 20\%$	2.3
ISDC6030M220T	22 $\pm 20\%$	0.1	0.16	1.5
ISDC6030N330T	33 $\pm 30\%$	0.1	0.22	1.3
ISDC6035M152T	1500 $\pm 20\%$	0.1	4.6	0.12

- ※ Inductance drop $\leq 30\%$  at IDC
- ※ I<sub>rms</sub>: Inductance rise 40C typ
- ※ Operating Temperature: -40C~+85°C