

## SMD POWER INDUCTORS

### Series DI - E *Ferrite powder shielded*

#### FEATURES

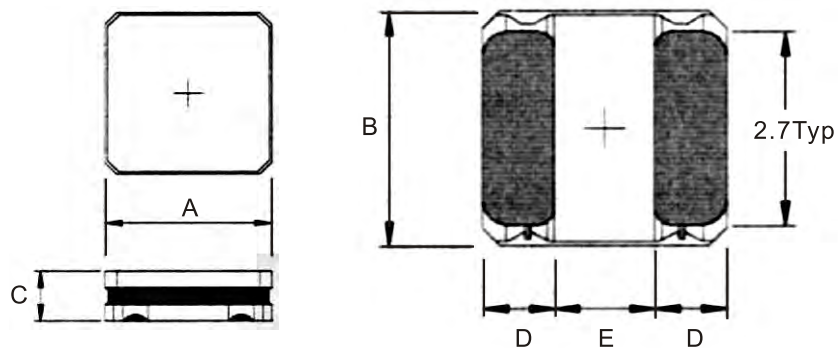
- Low DC Resistance, High Current capacity and high impedance characteristics.
- Excellent solder heat resistnace. Both flow and reflow soldering methods can employed.
- Magnetic epoxy resin with shielded.

#### PRODUCT IDENTIFICATION

$\frac{DI}{a}$     $\frac{30}{b}$     $\frac{E}{c}$     $\frac{10}{d}$     $\frac{2}{e}$     $\frac{M}{f}$     $\frac{10U}{g}$

- |                      |  |
|----------------------|--|
| a : Type of products | - SMD Power Inductors DI series.                             |
| b : Dimensions (mm)  | - 30 : 3.0X3.0   |
| c : Materials        | - E= DI with shielded  |
| d : Thickness (mm)   | - 10 = 1.0, 15 = 1.5   |
| e : Packing          | - PCS/REEL - 2 = 2,000                                       |
| f : Tolerance        | - 3 : $\pm 30\%$ , M : $\pm 20\%$                            |
| g : Inductance       | - 100N = 0.1 $\mu$ H, 10U = 10.0 $\mu$ H, 1M2 = 1200 $\mu$ H |

#### SHAPES & DIMENSIONS



Mark	Dimension in mm	
	DI30E10	DI30E15
A	3.0 $\pm$ 0.1	3.0 $\pm$ 0.1
B	3.0 $\pm$ 0.1	3.0 $\pm$ 0.1
C	1.0 max	1.5 max
D	0.9 $\pm$ 0.2	0.9 $\pm$ 0.2
E	1.2 $\pm$ 0.2	1.2 $\pm$ 0.2

## SMD POWER INDUCTORS

### Series DI - E Ferrite powder shielded ELECTRICAL CHARACTERISTICS

Part Number	Vinductance (uH) / 1MHz 0.2V	Tolerance (%)	RDC (Ω) ±20%	SRF (Mhz min.)	IDC (A) typ. L▽30%	IDC (A) max. L▽30%	IDC (A) typ. T△40°C
DI30E1023 1U	1	30	0.065	180	1.95	1.7	1.7
DI30E1023 1U5	1.5	30	0.08	140	1.6	1.4	1.65
DI30E102□ 2U2	2.2	20, 30	0.095	100	1.45	1.25	1.45
DI30E102□ 3U3	3.3	20, 30	0.16	80	1.05	0.9	1.3
DI30E102□ 4U7	4.7	20, 30	0.19	60	0.95	0.85	1.1
DI30E102□ 6U8	6.8	20, 30	0.3	50	0.76	0.66	0.85
DI30E102□ 10U	10	20, 30	0.45	45	0.61	0.53	0.72
DI30E102□ 15U	15	20, 30	0.74	35	0.48	0.42	0.56
DI30E102□ 22U	22	20, 30	0.98	25	0.42	0.36	0.5
DI30E102□ 33U	33	20, 30	1.55	24	0.34	0.28	0.415
DI30E102□ 47U	47	20, 30	2	19	0.27	0.24	0.32
DI30E1523 1U	1	30	0.04	145	2.35	2.1	2.35
DI30E1523 1U5	1.5	30	0.055	130	2	1.8	2.1
DI30E152□ 2U2	2.2	20, 30	0.06	90	1.65	1.48	1.8
DI30E152□ 3U3	3.3	20, 30	0.093	75	1.4	1.21	1.6
DI30E152□ 4U7	4.7	20, 30	0.113	65	1.2	1.08	1.4
DI30E152□ 6U8	6.8	20, 30	0.176	50	1.05	0.9	1.1
DI30E152□ 10U	10	20, 30	0.234	45	0.88	0.75	1
DI30E152□ 15U	15	20, 30	0.352	33	0.68	0.58	0.8
DI30E152□ 22U	22	20, 30	0.51	28	0.58	0.47	0.6
DI30E152□ 33U	33	20, 30	0.799	22	0.46	0.39	0.5
DI30E152□ 47U	47	20, 30	1.172	18	0.38	0.32	0.4
DI30E152□ 100U	100	20, 30	2.433	11	0.27	0.23	0.29

1. When ordering, please specify tolerance and packaging codes. Ex: DI30E Series

Tolerance : M = ±20% , 3 = ± 30%

Packaging : Clear tape and reel { standard }.

2. L, Idc : Agilent/HP 4284A , 1MHz with 200mV.

3. Rdc : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.

4. SRF : E4991

5. Idc : Based on Inductance decrease 30%

6. Operating temperature range from -40°C to 105°C (Including self-temperature rise)

7. Storage Temp. : -40°C to 85°C

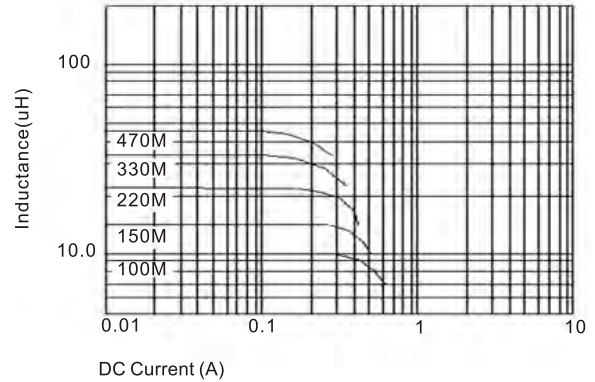
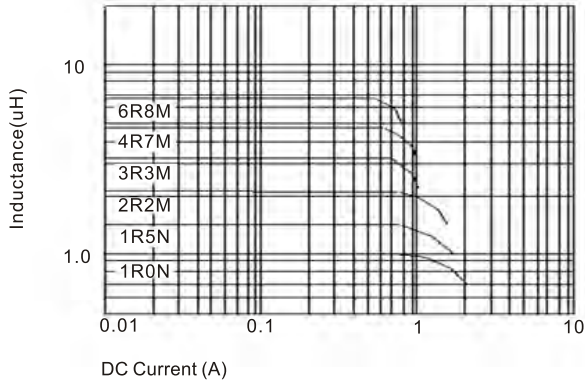
8. Recommended wire wound inductors should be used within 6 months from the time of delivery

# SMD POWER INDUCTORS

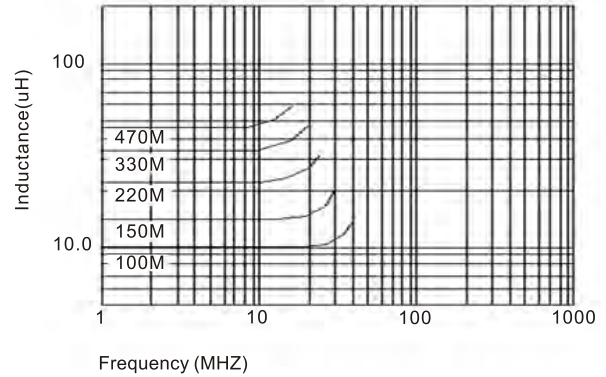
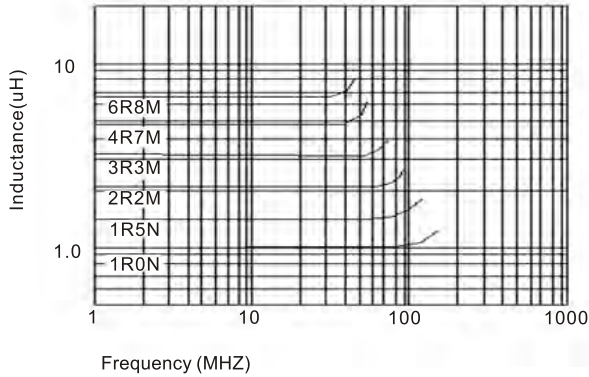
Series **DI - E** Ferrite powder shielded  
**CURVES**

## DI30E10

**Lvs Current**

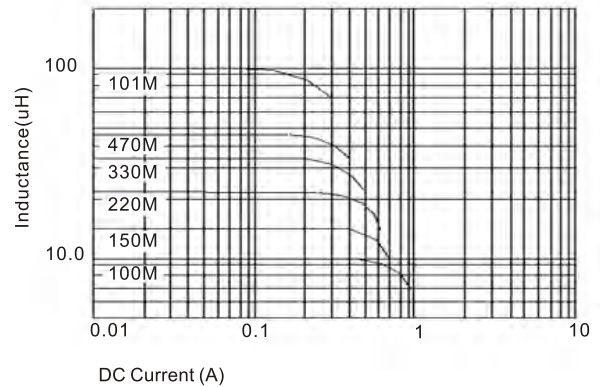
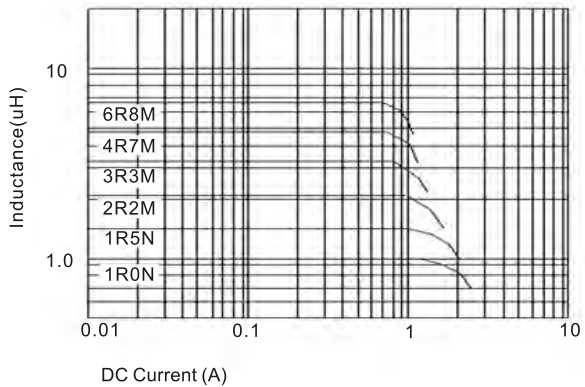


**Lvs Frequency**



## DI30E15

**Lvs Current**



**Lvs Frequency**

