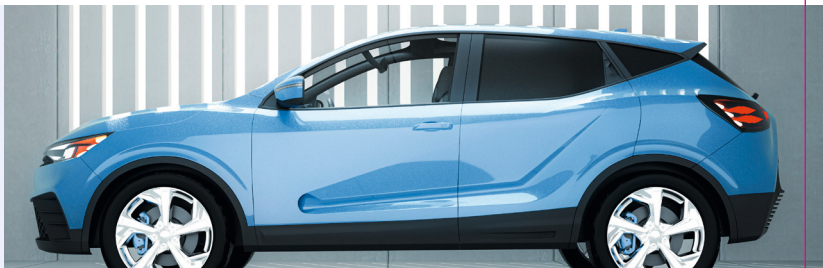




Sample Kit 2021

# SMT Power Inductors

B82464D6\*M000 Dual Inductors



[www.tdk-electronics.tdk.com](http://www.tdk-electronics.tdk.com)

## SMT Power Inductors – Dual Inductor 10.4 x 10.4 x 6.3 (mm)

$L_{ind} \pm 20\%$	$\mu H$	2.2	4.7	10	15	22	47
$I_R$	A	6.17	5.08	3.71	3.09	2.66	1.7
$I_{sat. typ}$	A	13.85	9.9	6.15	5.2	4.35	2.95
$R_{DC, typ}$	$m\Omega$	18	27	52	76	105	238
$K_{typ}$	%	95	97	99	99	99	99
Ordering code	B82464D6	222M000	472M000	103M000	153M000	223M000	473M000

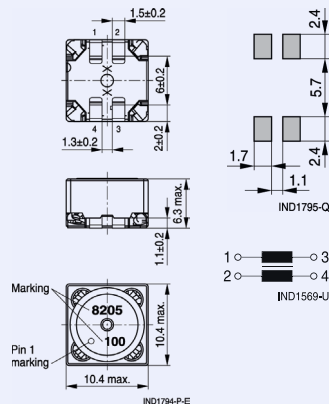
### Features

- Special winding technology for tight coupling of the two windings (coupling factor  $K = 95\%$  to  $99\%$ )
- Magnetically shielded
- Winding welded to terminals
- Base plate construction for high mechanical robustness
- Temperature range up to  $+150\text{ }^{\circ}\text{C}$
- Qualification to AEC-Q200

### Applications

- DC/DC converter, especially for SEPIC topology
- Buck converter with auxiliary output
- Common mode choke
- 1:1 transformer

**Inductance is per winding.** When leads are connected in parallel, inductance is the same value. When leads are connected in series, inductance is four times the value.  $R_{DC}$  is for each winding. When leads are connected in parallel,  $R_{DC} = R_1 \times R_2 / (R_1 + R_2)$ . When leads are connected in series,  $R_{DC} = R_1 + R_2$ .  $I_{sat}$  is the current flowing through one winding. When leads are connected in parallel,  $I_{sat}$  is the same. When leads are connected in series,  $I_{sat}$  is half the value.  $I_{R1}$  is the total current through both windings.  $I_1$  and  $I_2$  can be calculated like this:  $I_1^2 + I_2^2 = I_{R1}^2$



2.2  $\mu\text{H}$

4.7  $\mu\text{H}$

10  $\mu\text{H}$

15  $\mu\text{H}$

22  $\mu\text{H}$

47  $\mu\text{H}$

**Important information:** It is incumbent on the customer to check and decide whether a product is suitable for use in a particular application. Our products are described in detail in our data sheets. Our *Important notes* and the product-specific *Cautions and warnings* must be observed. All relevant information is available through our sales offices.