Sample Kit 2021

SMT Power Inductors

B82464D6*M000 Dual Inductors

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

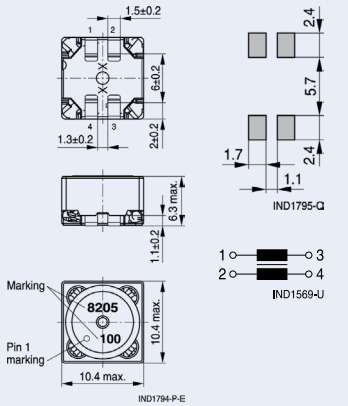
L_{ind} ±20%	µH	2.2	4.7	10	15	22	47
I_R	A	6.17	5.08	3.71	3.09	2.66	1.7
$I_{sat.\ typ}$	A	13.85	9.9	6.15	5.2	4.35	2.95
$R_{DC.\ typ}$	mΩ	18	27	52	76	105	238
K_{typ}	%	95	97	99	99	99	99
Ordering code	B82464D6	222M000	472M000	103M000	153M000	223M000	473M000

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 °C
- Qualification to AEC-Q200

Applications

- DC/DC converter, especially for SEPIC topology
- Buck converter with auxililary 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_R is the total current through both windings. I_1 and I_2 can be calculated like this: $I_1^2 + I_2^2 = I_R^2$