⯃TDK

Sample Kit 2021

SMT Power Inductors

B82472D6*M000 Dual Inductors

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SMT Power Inductors – Dual Inductor 7.3 x 7.3 x 4.8 (mm)

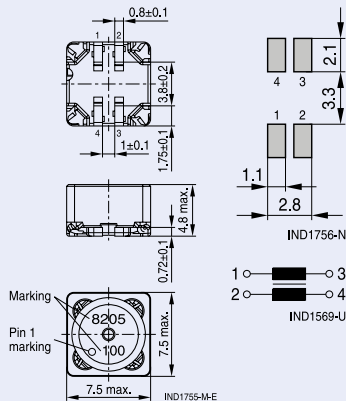| L_{ind} ±20%	µH	2.2	4.7	10	15	22	47
I_R	A	4.3	3.3	2.3	1.85	1.65	1.1
$I_{sat. typ}$	A	5.6	4.1	2.7	2.1	1.8	1.1
$R_{DC. typ}$	mΩ	30	47	95	144	177	400
K_{typ}	%	97	98	98	99	99	99
Ordering code	B82472D6	222M000	472M000	103M000	153M000	223M000	473M000

Features

- Special winding technology for tight coupling of the two windings (coupling factor K = 97% 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 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 parallel, R_{DC} is half the value. When leads are connected in series, R_{DC} is twice the value. 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: $I_1{}^2 + I_2{}^2 = I_R{}^2$
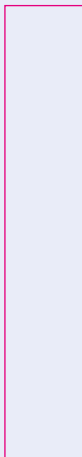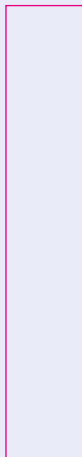

IND1756-N

IND1569-U

IND1755-M-E

2.2 µH   4.7 µH   10 µH   15 µH   22 µH   47 µH