

Sample Kit 2019

SMT Power Inductors

B82477D6



SMT Power Inductors – Dual Inductor 12.5 x 12.5 x 10.5 (mm)

$L_{1,2}$	μH	3.9	10	15	22	47.0
I_R	A	7.05	5.65	4.92	3.85	2.8
$I_{\text{sat, typ}}$	A	16.1	9.9	8.7	7.2	4.7
$R_{\text{DC, typ}}$	$\text{m}\Omega$	13.9	22.5	29.6	45	81.8
K_{typ}	%	97	98	99	99	99
Ordering code	B82477	D6392M603	D6103M603	D6153M603	D6223M603	D6473M603

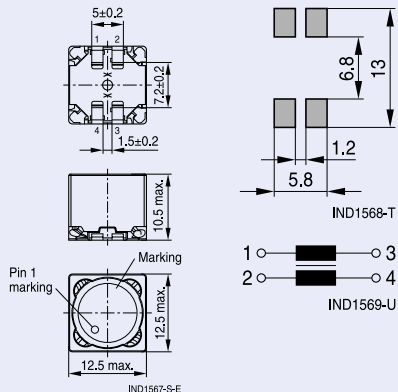
Features

- Special winding technology for tight coupling of the two windings (coupling factor K from 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

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, $R_{\text{DC}} = R_1 \times R_2 / R_1 + R_2$. 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: $I_1^2 + I_2^2 = I_R^2$

Applications

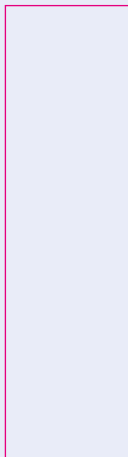
- Common mode choke
- DC/DC converter, especially for SEPIC topology
- 1:1 transformer



3.9 μH



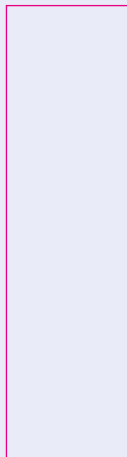
10.0 μH



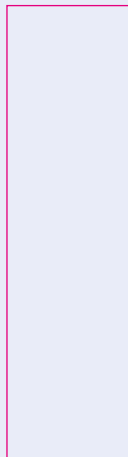
15.0 μH



22.0 μH



47.0 μH



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.