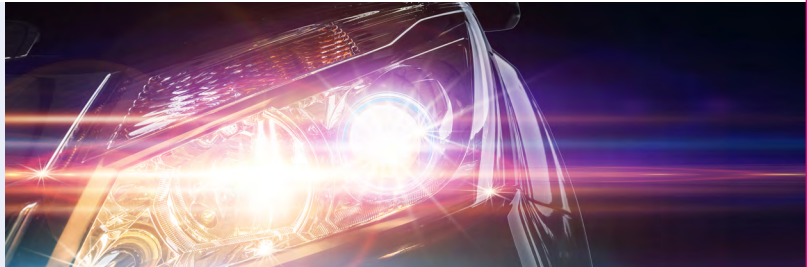


Sample Kit 2019

# SMT Power Inductors

B82477D6



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

$L_{1,2}$	$\mu\text{H}$	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
$K_{\text{typ}}$	%	97	98	99	99	99
Ordering code	B82477	D6392M603	D6103M603	D6153M603	D6223M603	D6473M603

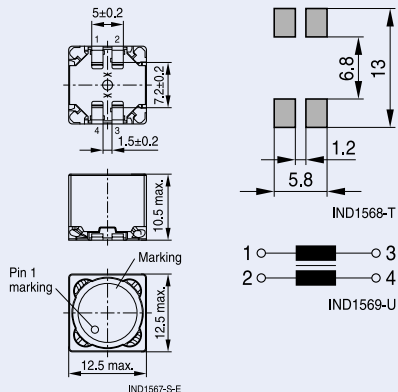
### Features

- 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.  $R_{\text{DC}}$  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,  $R_{\text{DC}}$  is twice the value.  $I_{\text{sat}}$  is the current flowing through one winding. When leads are connected in parallel,  $I_{\text{sat}}$  is the same. When leads are connected in series,  $I_{\text{sat}}$  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

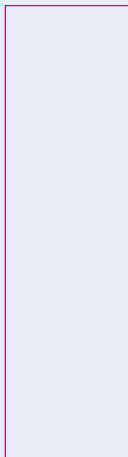
- Common mode choke
- DC/DC converter, especially for SEPIC topology
- 1:1 transformer



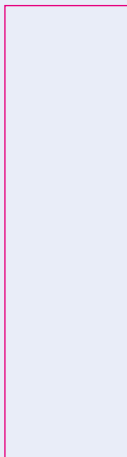
3.9  $\mu\text{H}$



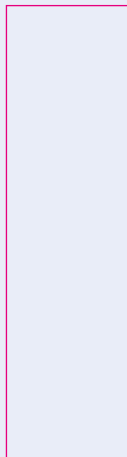
10.0  $\mu\text{H}$



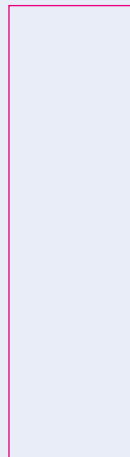
15.0  $\mu\text{H}$



22.0  $\mu\text{H}$



47.0  $\mu\text{H}$



**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.