Power line chokes

Current-compensated ring core double chokes
250 V AC, 1.8 … 68 mH, 1 … 10 A, +60 °C

Series/Type: **B82725J**

Date: October 2016

Rated voltage 250 V AC
Rated inductance 1.8 ... 68 mH
Rated current 1 ... 10 A, +60 °C

Construction

- C e -c e a ed c e d e c e
- Fe e c e e c a (UL 94 V-0)
- P a c ca e - ded (UL 94 V-0)[1)]
- P (UL 94 V-0)
- Sec d

Features

- H e a ce e c d ec a d ec e
- A . 1% a d a ce e ca e e ce e
- S ab e a e de
- De c e EN 60938-2 (VDE 0565-2) a d UL 1283
- UL[2)] a d/ ENEC (VDE) a a
- R HS-c a b e

Applications

- S e c - de e e e ce
- S c - de e a ca
- P e e e

Terminals

- Ba e a e a C N 18Z 20
- La e c N , S
- H -d ed
- P 1 Δ 1 ( )
- Lead ac 17.5 Δ 12.5 ( )

Marking

- Product brand, approval signs and VDE standard number, ordering code, graphic symbol, rated current, rated voltage, rated inductance, date of manufacture (YYWWD.internal ID code)

Delivery mode

- B e a ca db a d b

1) Add a ce ed a e :
G e a ab de (GWFI IEC 60695-2-12): +850 C
G e e e a e (GWIT IEC 60695-2-13): +775 C
C a a e ac de (CTI IEC 60112): 175 V
Ba e e e (BP IEC 60695-10-2): +125 C

2) UL a a 300 V AC

P ea e ead *Cautions and warnings* a d *Important notes* a e e d d c e .

Dimensional drawing and pin configuration

Technical data and measuring conditions

Ra ed a e V_R	250 V AC (50/60 H)
Te a e V_e	1500 V AC, 2 (e/ e)
Ra ed e e a e T_R	+60 C
Ra ed c e I_R	Re e ed 50 H a d a ed e e a e
Ra ed d a ce L_R	Mea ed A e 4284A a 10 H , 0.1 A, +20 C
I d a ce e a ce	I d a ce ec ed e d .

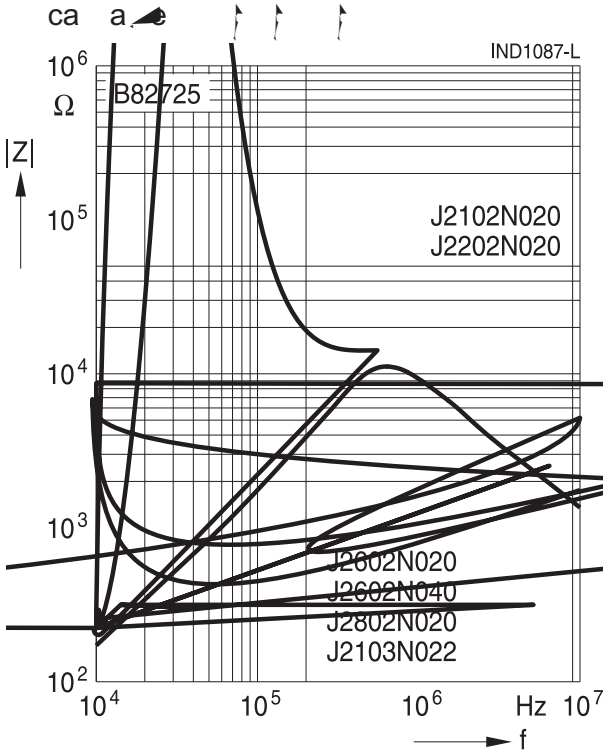
Characteristics and ordering codes

I_R A	L_R H	L a , σH	R T	T_R C	O de c de	A a	
1	68	650	1050	60	B82725J2102N020	Δ	Δ
2	18	150	270	60	B82725J2202N020	Δ	Δ
4	6.8	60	75	60	B82725J2402N020	Δ	Δ
6	3.9	30	30	60	B82725J2602N020	Δ	Δ
6	7.5	70	40	60	B82725J2602N040	Δ	Δ
8	2.7	25	20	60	B82725J2802N020	Δ	Δ
10	2.5	20	15	60	B82725J2103N021	Δ	Δ
10	1.8	17	13	60	B82725J2103N022	Δ	Δ

Δ#= a a a ed

Impedance |Z| versus frequency f

ea ed d a a e a +20 C,
ca a e



Current derating I_{op}/I_R versus ambient temperature T_A

Cautions and warnings

- Please note the recommendations in our Inductors data book (latest edition) and in the data sheets.
  - Particular attention should be paid to the derating curves given there.
  - The soldering conditions should also be observed. Temperatures quoted in relation to wave soldering refer to the pin, not the housing.
- If the components are to be washed varnished it is necessary to check whether the washing varnish agent that is used has a negative effect on the wire insulation, any plastics that are used, or on glued joints. In particular, it is possible for washing varnish agent residues to have a negative effect in the long-term on wire insulation.
  Washing processes may damage the product due to the possible static or cyclic mechanical loads (e.g. ultrasonic cleaning). They may cause cracks to develop on the product and its parts, which might lead to reduced reliability or lifetime.
- The following points must be observed if the components are potted in customer applications:
  - Many potting materials shrink as they harden. They therefore exert a pressure on the plastic housing or core. This pressure can have a deleterious effect on electrical properties, and in extreme cases can damage the core or plastic housing mechanically.
  - It is necessary to check whether the potting material used attacks or destroys the wire insulation, plastics or glue.
  - The effect of the potting material can change the high-frequency behaviour of the components.
- Ferrites are sensitive to direct impact. This can cause the core material to flake, or lead to breakage of the core.
- Even for customer-specific products, conclusive validation of the component in the circuit can only be carried out by the customer.

Display of ordering codes for EPCOS products

The ordering code for one and the same product can be represented differently in data sheets, data books, other publications and the website of EPCOS, or in order-related documents such as shipping notes, order confirmations and product labels. **The varying representations of the ordering codes are due to different processes employed and do not affect the specifications of the respective products**. Detailed information can be found on the Internet under www.epcos.com/orderingcodes.

Important notes