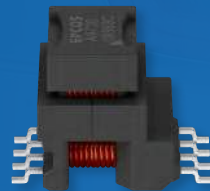




Sample Kit

# SMT Isolated Transformers

E13 EMHV Series –  
B78308A\*A003



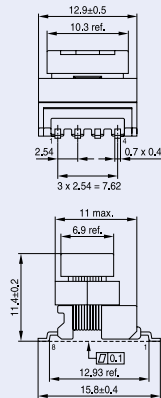
[www.tdk-electronics.tdk.com](http://www.tdk-electronics.tdk.com)

## Auxiliary Gate Drive Transformers – E13 Core (SMT)

Turns ratio	Np : Ns	1 : 0.22 : 0.78	1 : 0.33 : 0.67	1 : 1.07	1 : 1.07	1 : 1 : 0.57 : 2.14
L <sub>min</sub>	μH	4.1	4.1	>100	>90	>90
C <sub>p</sub> N1/N2	pF	-	-	9	2	6
R <sub>DC, N1</sub>	mΩ	75	75	260	260	175
E*dtN1 (max, unipolar/bipolar)	μVs	-	-	15/30	15/30	25/50
Ordering code	B78308*	A2461A003	A2462A003	A2387A003	A2484A003	A2485A003

### Technical data

- All values measured at +25 °C ambient temperature
- Frequency range: 100 ... 500 kHz (typ.)
- Operating temperature range: -40 °C ... +150 °C
- High voltage test AC N1/N2: 3000 V AC (50 Hz, 1 s)
- Partial discharge inception voltage N1/N2: >1500 V peak (type test)
- Partial discharge extinction voltage N1/N2: >1200 V peak (type test)
- PRI/SEC (cumulative): creepage 11.2 mm, clearance 8.14 mm
- Core/Top surface: creepage & clearance 3.25 mm
- PRI/core: creepage 7.5 mm, clearance 5.1 mm
- SEC/core: creepage 3.7 mm, clearance 3.05 mm
- Insulation distances sufficient for basic insulation according to IEC 60664-1, 61558-2-16 for working voltage 1000 V DC, transient over voltage 2500 V<sub>Peak</sub>, P2, CTI IIIa, 5000 m altitude
- Insulation distances sufficient for reinforced insulation according to IEC 60664-1, 61558-2-16 for working voltage 300 V, P2, OVC II, CTI IIIa, 2000 m altitude
- Tape and reel packing: 44 mm blister tape, 330 mm reel
- Packing units: 190 pcs./reel



IND1925-C

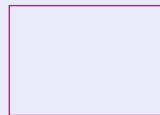
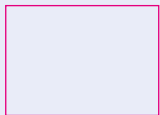
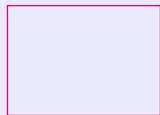
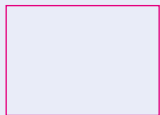
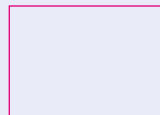
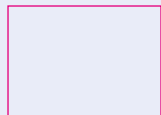
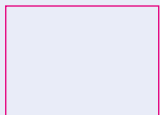
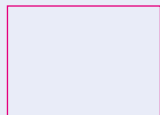
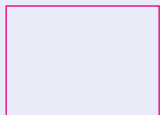
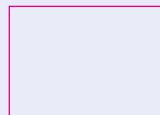
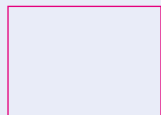
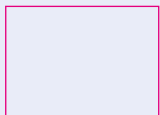
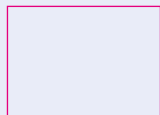
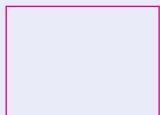
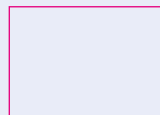
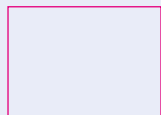
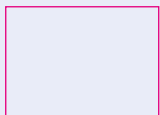
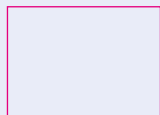
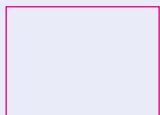
P302031  
B78308A2461A003

P302098  
B78308A2462A003

P301085  
B78308A2387A003

P302525  
B78308A2484A003

P303085  
B78308A2485A003



**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.