

Common Mode Filters(SMD) For CAN-BUS/FlexRay

Conformity to RoHS Directive

ACT Series ACT45B Type

FEATURES

- Operating temperature range covers from -40 to $+150^{\circ}\text{C}$.
- Non-dissolution of the abutment amounts in circuit board mounting.
- The products contain no lead and also support lead-free soldering.
- This product conforms to the standards that are slated to be introduced under the RoHS Directive.

APPLICATIONS

CAN-BUS/FlexRay system, facsimiles, modems, ISDN

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 pieces/reel

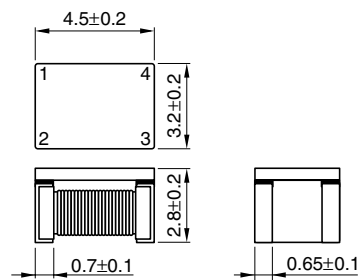
PRODUCT IDENTIFICATION

ACT45B - 510 - 2P - TL -

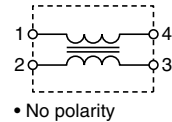
(1) (2) (3) (4) (5)

- (1) Series name
 (2) Inductance value (typ.)
 (3) Number of line
 2P: 2-line
 (4) Packaging style
 TL: $\phi 330\text{mm}$ reel taping
 (5) TDK internal code

SHAPES AND DIMENSIONS



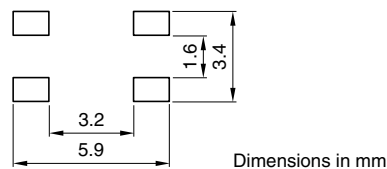
CIRCUIT DIAGRAM



Weight: 0.14g

Dimensions in mm

RECOMMENDED PC BOARD PATTERN



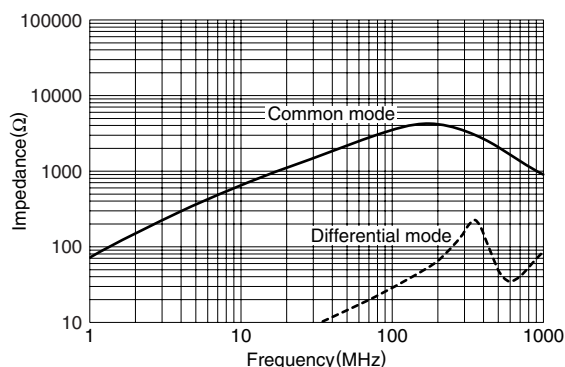
ELECTRICAL CHARACTERISTICS

Part No.	Common mode impedance (Ω) [10MHz]		Common mode inductance (μH) +50/-30% [100kHz]	Stray inductance (μH) typ. [100kHz]	DC resistance (Ω) max.	Rated current (A) max.	Insulation resistance ($\text{M}\Omega$) min.	Rated voltage (V) max.
	min.	typ.						
ACT45B-110-2P	300	700	11	0.05	0.6	0.25	10	50
ACT45B-220-2P	500	1000	22	0.08	1.0	0.2	10	50
ACT45B-510-2P	1000	2000	51	0.15	1.0	0.2	10	50
ACT45B-101-2P	2000	5000	100	0.20	3.0	0.15	10	50

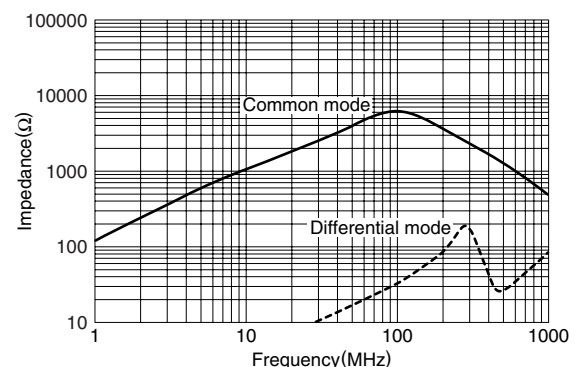
TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS

ACT45B-110-2P



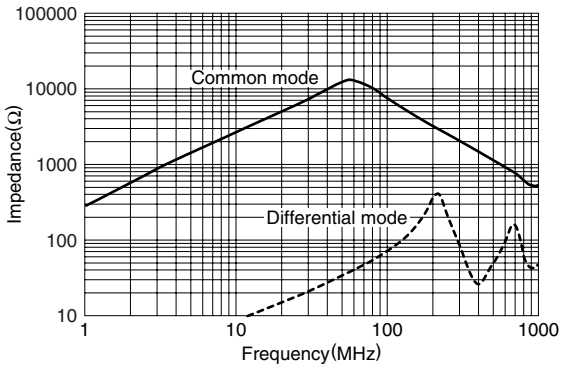
ACT45B-220-2P



• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

TYPICAL ELECTRICAL CHARACTERISTICS
IMPEDANCE vs. FREQUENCY CHARACTERISTICS
ACT45B-510-2P



ACT45B-101-2P

