### **&TDK**

# Common Mode Filters(SMD) For CAN-BUS

### **Conformity to RoHS Directive**

## ACT Series ACT45B Type

#### **FEATURES**

- Operating temperature range covers from -40 to +150°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 system, facsimiles, modems, ISDN

#### **PACKAGING STYLE AND QUANTITIES**

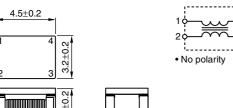
Packaging style	Quantity
Taping	2000 pieces/reel

#### PRODUCT IDENTIFICATION

$$\frac{ACT45B}{(1)} - \frac{510}{(2)} - \frac{2P}{(3)} - \frac{TL}{(4)} - \frac{\Box\Box\Box}{(5)}$$

- (1) Series name
- (2) Inductance value (typ.)
- (3) Number of line
- 2P: 2-line
  (4) Packaging style
  - TL: ø330mm reel taping
- (5) TDK internal code

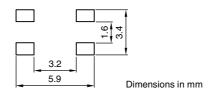
#### **SHAPES AND DIMENSIONS**



Weight: 0.14g

**CIRCUIT DIAGRAM** 

#### RECOMMENDED PC BOARD PATTERN

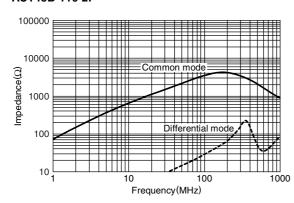




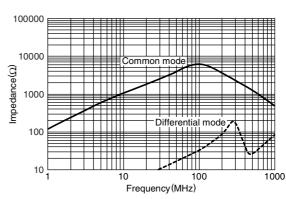
#### **ELECTRICAL CHARACTERISTICS**

Part No.	Common mode impedance $(\Omega)[10MHz]$		Common mode inductance (μH)+50/–30%	Stray inductance (µH)typ. [100kHz]	DC resistance (Ω)max.	Rated current (A)max.	Insulation resistance $(M\Omega)$ min.	Rated voltage (V)max.
	min.	typ.	[100kHz]	[TOOKHZ]			(10152)111111.	
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	0.1	10	50

# TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE vs. FREQUENCY CHARACTERISTICS ACT45B-110-2P



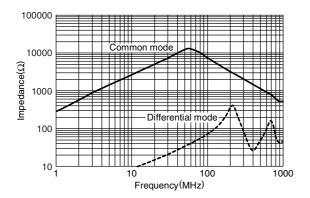
#### ACT45B-220-2P



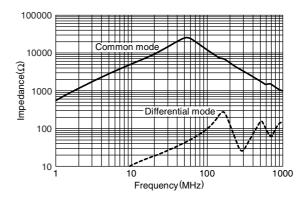
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
- All specifications are subject to change without notice.



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



### ACT45B-101-2P



<sup>•</sup> All specifications are subject to change without notice.