

ACT/ACM Series Common-Mode Filter Kit

For signal line use in consumer & automotive applications



TDK's ACT/ACM Series Common-mode Filter Kit was designed for consumer and automotive applications requiring signal line noise reduction.



Kit Includes: 170 pieces total—10 of each part number

ACT1210

Automotive Grade—AEC-Q200

- 3.2x3.2mm size (Approx. 44% smaller mounting area and 50% lower volume than existing series)
- Common-mode Inductance Range: 11-100 μ H
- Rated Current: 300-150mA max.
- DC Resistance: 0.4-1.5 Ω max.
- Operating temperature range of -55°C to $+150^{\circ}\text{C}$
- Applications Include: CAN-BUS, FlexRay System

ACT45B

Automotive Grade – AEC-Q200

- 4.5x3.2mm size
- Common-mode Inductance Range: 11-100 μ H
- Rated Current: 0.25-0.15A max.
- DC Resistance: 0.6-2.0 Ω max.
- Operating temperature range of -40°C to $+150^{\circ}\text{C}$
- Applications Include: CAN-BUS, FAXs, Modems, ISDNs, etc...

ACT45R

Automotive Grade—AEC-Q200

- Achieves DCR < 2 Ω @ 125 $^{\circ}\text{C}$ by reducing DC resistance while maintaining a high L-value of 100 μ H
- 4.5x3.2mm size
- Common-mode Inductance Value: 100 μ H
- Rated Current: 0.2A max.
- DC Resistance: 1.5 Ω max.
- Operating temperature range of -40°C to $+150^{\circ}\text{C}$
- Applications Include: FlexRay System

ACM2012

Consumer Grade

Automotive Grade—AEC-Q200

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| <ul style="list-style-type: none"> • Common-mode Impedance Range: 90-200Ω • Operating temperature range of -40°C to $+85^{\circ}\text{C}$ • Rated Current: 0.4-0.22A max. • DC Resistance: 0.19-0.5Ω max. • USB line for PCs, IEEE1394 lines and ETHERNET lines for PCs, STBs, etc., LCD panel LVDS and Panel Link lines | <ul style="list-style-type: none"> • Common-mode Impedance Range: 90-360Ω • Operating temperature range of -40°C to $+105^{\circ}\text{C}$ • Rated Current: 0.4-0.22A max. • DC Resistance: 0.19-0.5Ω max. • Car multimedia interfaces (MOST, USB2.0, IDB-1394, etc...) |
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Digi-Key Part Number	TDK Part Number	Description	Series	Automotive Grade
445-174231-ND	ACT1210-101-2P-TL00	1210, Choke, 100 μ H, 150mA	ACT1210	Yes
	ACT1210-110-2P-TL00	1210, Choke, 11 μ H, 300mA	ACT1210	Yes
	ACT1210-220-2P-TL00	1210, Choke, 22 μ H, 250mA	ACT1210	Yes
	ACT1210-510-2P-TL00	1210, Choke, 51 μ H, 200mA	ACT1210	Yes
	ACT45B-101-2P-TL003	4532, Choke, 100 μ H, 150mA	ACT45B	Yes
	ACT45B-110-2P-TL003	4532, Choke, 11 μ H,250mA	ACT45B	Yes
	ACT45B-220-2P-TL003	4532, Choke, 22 μ H, 200mA	ACT45B	Yes
	ACT45B-510-2P-TL003	4532, Choke, 51 μ H, 200mA	ACT45B	Yes
	ACT45R-101-2P-TL001	4532, Choke, 100 μ H, 200mA	ACT45R	Yes
	ACM2012-900-2P-T001	2012, Choke, 65 Ω , 400mA	ACM2012	Yes
	ACM2012-121-2P-T001	2012, Choke, 90 Ω , 370mA	ACM2012	Yes
	ACM2012-201-2P-T001	2012, Choke, 150 Ω , 350mA	ACM2012	Yes
	ACM2012-361-2P-T001	2012, Choke, 270 Ω , 220mA	ACM2012	Yes
	ACM2012-900-2P-T002	2012, Choke, 65 Ω , 400mA	ACM2012	No
	ACM2012-121-2P-T002	2012, Choke, 90 Ω , 370mA	ACM2012	No
	ACM2012-201-2P-T002	2012, Choke, 150 Ω , 350mA	ACM2012	No
ACM2012-361-2P-T002	2012, Choke, 270 Ω , 220mA	ACM2012	No	