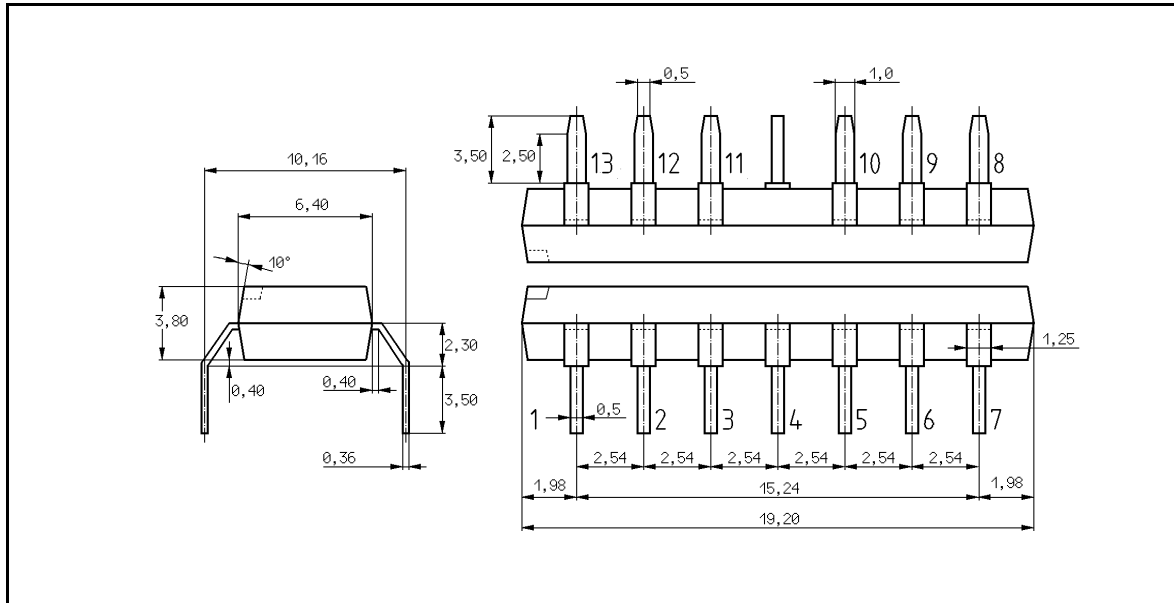


# Current Sensor

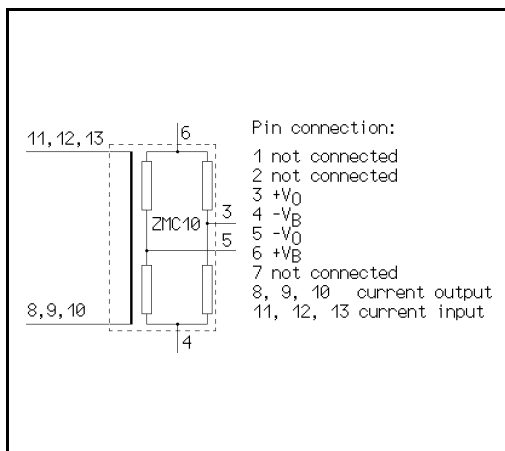
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## ZMC10



**package : modified DIL-14**

1, 2, 7: not connected 3: +V<sub>O</sub> 4: -V<sub>B</sub> 5: -V<sub>O</sub> 6: +V<sub>B</sub> 8, 9, 10: current output 11, 12, 13: current input  
V<sub>O</sub> - output voltage V<sub>B</sub> - supply voltage



### FEATURES

- Package : mod. DIL-14
- A magnetic sensor chip (employing the magnetoresistive effect of thin film permalloy) measures the magnetic field generated by an internal current-carrying conductor
- measurable direct or alternating current I<sub>M</sub> up to 10A
- supply voltage 12 V
- no auxiliary field H<sub>X</sub> required
- it's possible to overload the conductor (between pin's 8,9,10 and 11,12,13) with 300A for 10 ms at T<sub>amb</sub> = 25 °C

## ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol		Unit
Supply voltage	V <sub>B</sub>	12	V
Isolation voltage	V <sub>ISOL</sub>	2	kV
Measurable current	I <sub>M</sub>	10	A
Operating temperature range	T <sub>amb</sub>	-40 to +120	°C
Storage temperature range	T <sub>stg</sub>	-65 to +120	°C

## ELECTRICAL CHARACTERISTICS (at T<sub>amb</sub> = 25 °C unless otherwise stated)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test conditions
Bridge resistance	R <sub>br</sub>	1.2	1.7	2.2	kΩ	
Offset voltage	V <sub>Off</sub>	-	-	±2	mV/V	
Open circuit sensitivity	S	-	0.5	-	(mV/V)/A	
Resistance of the conductor	R	-	0.7	-	mΩ	
Operating frequency	f <sub>max</sub>	-	-	100	kHz	
Temperature coefficient of open circuit sensitivity	T <sub>C</sub>	-	-	-0.3	%/K	

Devices are identified by type on the body of the device

ZMC10 ..... ZMC10

Ordering information:

ZMC10 ..... in boxes (10 components per box)

Europe	Americas	Asia Pacific	Corporate Headquarters
Zetex GmbH Streitfeldstraße 19 D-81673 München Germany	Zetex Inc 700 Veterans Memorial Highway Hauppauge, NY 11788 USA	Zetex (Asia Ltd) 3701-04 Metroplaza Tower 1 Hing Fong Road, Kwai Fong Hong Kong	Zetex Semiconductors plc Zetex Technology Park, Chadderton Oldham, OL9 9LL United Kingdom
Telefon: (49) 89 45 49 49 0 Fax: (49) 89 45 49 49 49 europe.sales@zetex.com	Telephone: (1) 631 360 2222 Fax: (1) 631 360 8222 usa.sales@zetex.com	Telephone: (852) 26100 611 Fax: (852) 24250 494 asia.sales@zetex.com	Telephone: (44) 161 622 4444 Fax: (44) 161 622 4446 hq@zetex.com

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