



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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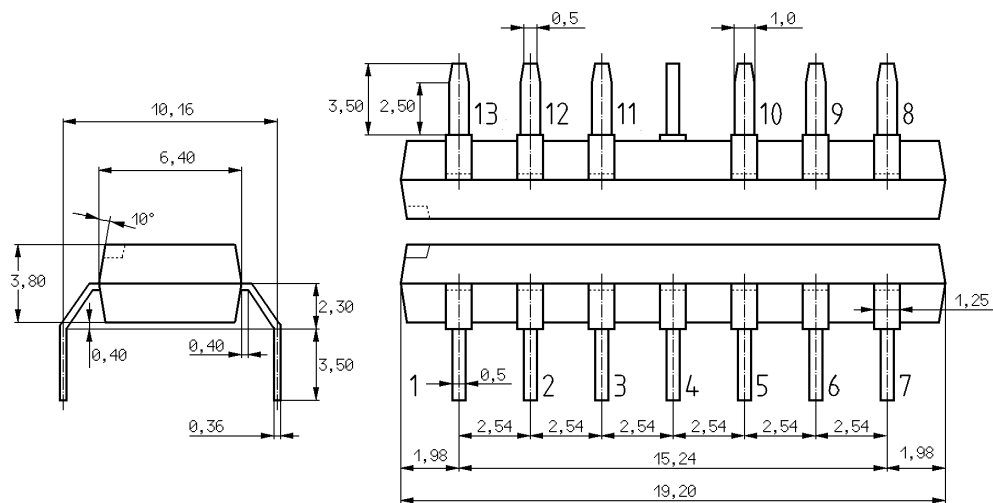
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Current Sensor

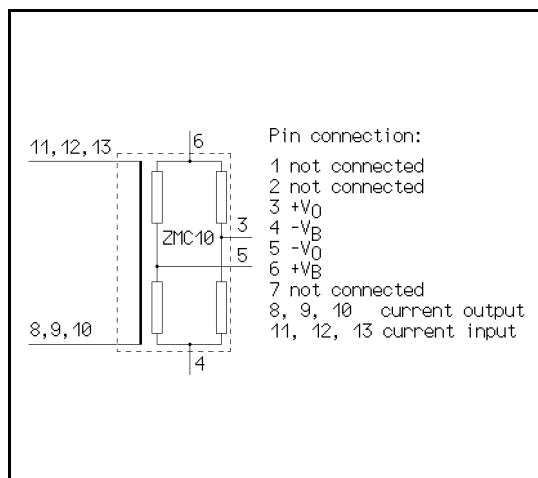
Issue 2 - July 2006

## 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)

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