



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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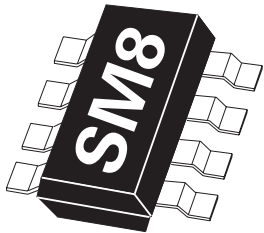


ZMC05

CURRENT SENSOR

DESCRIPTION

The ZMC05 allows the measurement direct or alternating current up to 5A. It consists of a magnetic sensor chip (employing the magneto resistive effect of thin Permalloy), which measures the magnetic field generated by an internal-carrying conductor.



FEATURES

- Package : SM-8
- Supply voltage 12 V
- No Auxiliary Field Required
- Measurable current I_M up to 5A
- Available on 12mm tape

APPLICATION

- Contactless and free from losses current measurement
- Automotive
- Battery Power Equipment
- Power Supplies
- Electric Motor Control
- Power Management

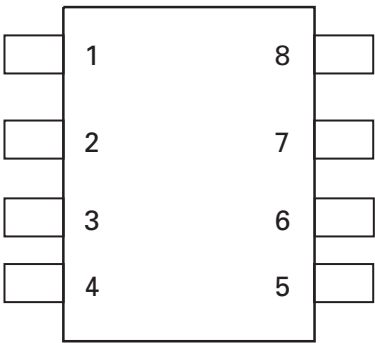
ORDERING INFORMATION

DEVICE	REEL SIZE	TAPE WIDTH	QUANTITY PER REEL
ZMC05TA	7"	12mm	1000
ZMC05TC	13"	12mm	4000

DEVICE MARKING

ZMC05

PINOUT DIAGRAM



PIN CONNECTION

- | | |
|-------------------|----------------------|
| 1) Do not connect | 5) -VO |
| 2) +VO | 6) Current input |
| 3) Current output | 7) +VB |
| 4) -VB | 8) Do not connection |

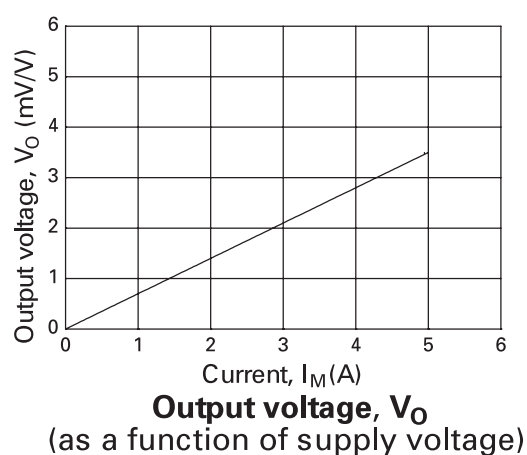
ZMC05

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	LIMIT	UNIT
Supply Voltage	V_B	12	V
Measurable current at DC: absolute value at AC: peak value	I_M	5	A
Operating temperature range	T_{amb}	-25 to +125	°C
Storage temperature range	T_{stg}	-25 to +125	°C

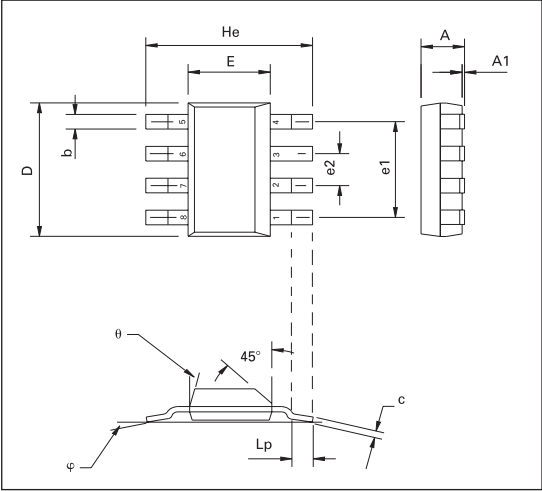
ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ unless otherwise stated)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Input - Output - Insulation (pins 3,6 shorted together & pins 2,4,5,7 shorted together)	I_{I-O}			100	nA	test voltage: 200V DC test time: 50ms
Bridge resistance	R_{br}	1.2	1.7	2.2	$k\Omega$	
Offset voltage	V_{Off}			± 2	mV/V	
Open circuit sensitivity	S	0.5	0.7	0.9	(mV/V)/A	
Resistance of the conductor	R		0.7		$m\Omega$	
Operating frequency	f_{max}			100	kHz	



ZMC05

PACKAGE OUTLINE



PACKAGE DIMENSIONS

DIM	MILLIMETRES	
	MIN	MAX
A	—	1.7
A1	0.02	0.1
b	0.7 TYP	
c	0.24	0.32
D	6.3	6.7
E	3.3	3.7
e1	4.59 TYP	
e2	1.53 TYP	
He	6.7	7.3
Lp	0.9	—
θ	—	15°
φ	10° TYP	

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