



CSNE151
 M
 DRAWING NUMBER
 6
 ISSUE

DESCRIPTION

CSNE151 IS A MULTI-RANGE CURRENT SENSOR MODULE BASED ON THE 'NULL BALANCE' HALL EFFECT PRINCIPLE. 5, 6, 8, 12 OR 25A CAN BE MEASURED BY SELECTING THE APPROPRIATE 1 TO 5 PRIMARY TURNS.

ACCURACY DATA

OFFSET :- ± 0.05 mA TYP.
 ± 0.15 mA MAX.
 OFFSET DRIFT WITH TEMP. :- ± 0.17 mA TYP.
 ± 0.6 mA MAX.
 LINEARITY :- $\pm 0.2\%$ I_{pn}
 RESPONSE TIME :- $< 1 \mu s$
 FREQUENCY :- DC TO 150KHz

ENVIRONMENTAL DATA

OPERATING TEMP. :- 0 TO +70°C
 STORAGE TEMP. :- -40 TO +90°C

ELECTRICAL DATA

NOMINAL PRIMARY CURRENT I_{pn} :- 25A rms
 MEASURING RANGE I_p :- 0 TO ± 36 A
 LOAD RESISTANCE :- $R_{m \min}$ $R_{m \max}$
 $\pm 25A.t \max$ 100Ω 320Ω
 $\pm 36A.t \max$ 100Ω 190Ω
 SUPPLY VOLTAGE :- $\pm 15V$ ($\pm 5\%$)
 DIELECTRIC STRENGTH :- 5.0KVrms/50Hz/1min.
 CURRENT CONSUMPTION :- $10 + I_s$ mA
 PRIMARY INTERNAL RESISTANCE :- < 1.25 mΩ/TURN
 SECONDARY INTERNAL RESISTANCE :- 110Ω MAX AT +70°C.

PRIMARY TURNS	PRIMARY CURRENT		NOM. OUTPUT CURRENT (mA) I_s	PRIMARY RESISTANCE (mΩ)	PRIMARY INSERTION INDUCTANCE (μH)	PIN CONNECTIONS
	NOM. I_{pn} (A)	MAX. I_p (A)				
1	25	36	25	0.3	0.023	
2	12	18	24	1.1	0.09	
3	8	12	24	2.5	0.21	
4	6	9	24	4.4	0.37	
5	5	7	25	6.3	0.58	

3/94
 M. LOCH
 CHECK
 DESIGN
 AUTHOR*N

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THIRD ANGLE PROJECTION

MODIFY ON CAD SYSTEM ONLY

SCALE :- 2:1

DIMENSIONS ARE IN MILLIMETRES

RECOMMENDED P.C.B. HOLE :- $\emptyset 1.2$