



CSNE151-005
 DO NOT SCALE PRINT
 ISSUE 1 2
 REVISIONS
 21 WJ 1/98
 RELEASE No. A.301-01 REPLACES
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 CHECK
 DESIGN
 AUTHORN

DESCRIPTION

CSNE151-005 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. :- ±0.17mA TYP.
 ±0.6mA MAX.
 LINEARITY :- ±0.2% I_{pn}
 RESPONSE TIME :- <1μS
 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 ±36A
 LOAD RESISTANCE :- R_m min R_m max
 ±25A.t max 100Ω 320Ω
 +36A.t max 100Ω 190Ω
 SUPPLY VOLTAGE :- ±15V (±5%)
 DIELECTRIC STRENGTH :- 5.0KVrms/50Hz/1min.
 CURRENT CONSUMPTION :- I₀ + I_s mA
 PRIMARY INTERNAL RESISTANCE :- <1.25mΩ/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	

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THIRD ANGLE PROJECTION

MODIFY ON CAD30 SYSTEM ONLY

SCALE :- 2:1

DIMENSIONS ARE IN MILLIMETRES