

Class Loop Current Sensor

ELECTRICAL DATA/INPUT :

Primary Nominal R.M.S. Current Ir(A)	Primary Current Measuring Range Ip(A) at Vcc=5V	Part Name Type	Part Number
25	50	CPLG-25A-A1	CT036XXXXXXXX
Vcc	Supply Voltage		5V ±5%
Ic	Current Consumption		≤20mA +(Ir/1000)A
Iis	R.M.S. Voltage for 3.5KVAC Isolation test, 50/60Hz, 1min		<10mA
Ris	Isolation Resistance at 600 VDC		>500Mohm
CR	Conversion ratio [Primary Turn(t) = 1~3]		1-2-3:1000

ELECTRICAL DATA/OUTPUT

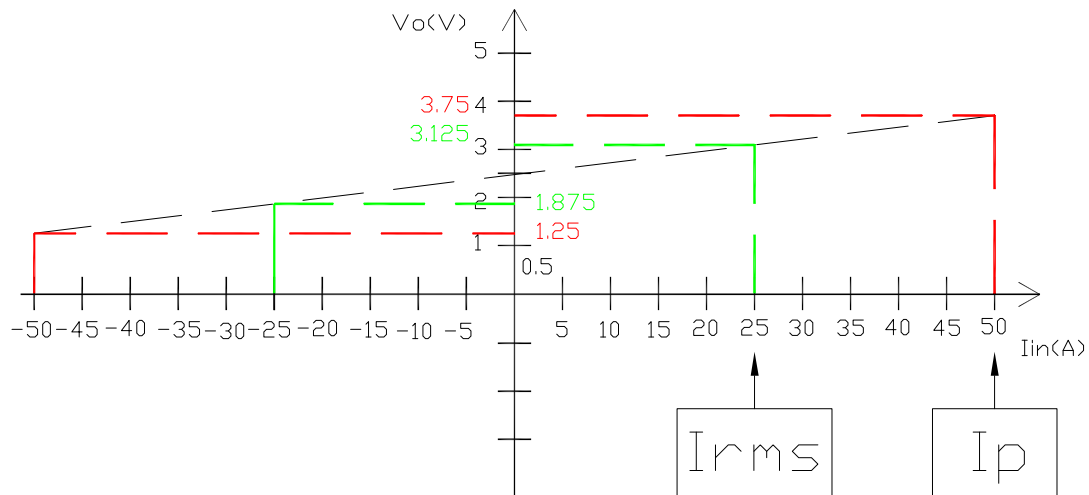
Vout	Output voltage at Ir ^{*(1)} , TA=25°C =>8A	2.5±0.6V
	=>12A	2.5±0.6V
	=>25A	2.5±0.625V
CL	Output Load Capacitor	<10nF@Vout~GND
RL	Load Resistor	>2Kohm
X	Accuracy at Ir, TA=25°C (without offset)	<±0.7%
Voe	Electrical Offset Voltage, TA=25°C	2.5V±15mV
Vom	Magnetic Offset Voltage (Ir→0)	<±5mV
Vot	Thermal Drift of Offset Voltage	<±0.5mV/°C
Tr	Response Time to 90% of Ir(f=1KHz)	<1us
FB	Frequency Bandwidth (-3dB)	200KHz
di /dt	Accurately Followed	>50A/us
dCp	Creepage Distance (on case)	6.5mm

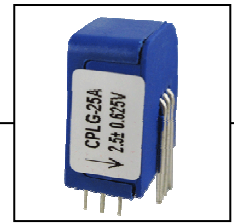
GENERAL DATA :

TA	Ambient Operating Temperature	-40 ~ +85°C
Ts	Ambient Storage Temperature	-40 ~ +125°C

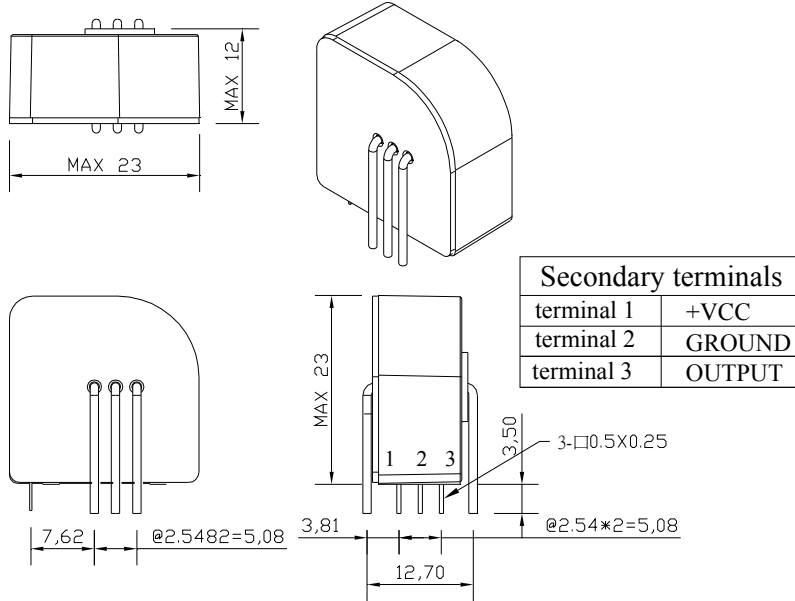
***(1)Referring to the primary connection V.S. current**

Output voltage v.s. Input current: Ex: Irms=25A ; Ip=25*2=50A, Vcc=5V(Single power)

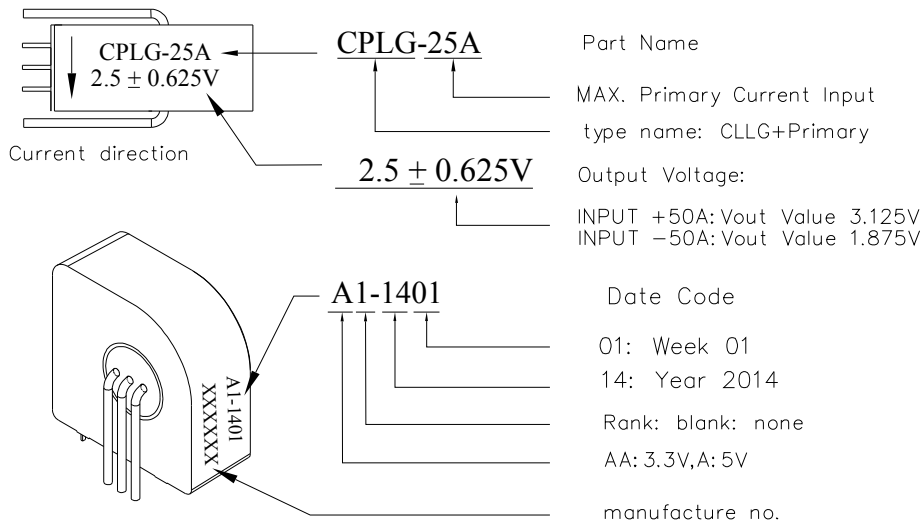




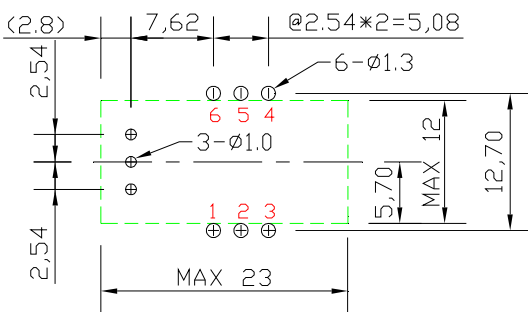
Outline dimension & Pin definition (all tolerance:±0.5mm)



Marking & Description



Layout Recommend:



Number of Primary turns	Primary nominal current rms I _{pn} (A)	Nominal output Voltage V _o (V)	Recommended connections
1	±25	2.5±0.625	
2	±12	2.5±0.600	
3	±8	2.5±0.600	