

Hall Current Sensor CYHCS007-F



Electrical Data/Input

Primary Nominal RMS Current I_r (A)	Primary Current Measuring Range I_p (A) at $V_{cc}=15V$	Aperture (mm)	Part Number
50	± 150	20x10	CYHCS-G0500-F
100	± 300	20x10	CYHCS-G1000-F
200	± 600	20x10	CYHCS-G2000-F
300	± 900	20x10	CYHCS-G3000-F
400	± 900	20x10	CYHCS-G4000-F
500	± 900	20x10	CYHCS-G5000-F
600	± 900	20x10	CYHCS-G6000-F

Supply Voltage
Current Consumption
RMS Voltage for 2.5kV AC isolation test, 50/60Hz, 1min,
Isolation Resistance at 500V DC

$V_{cc} = \pm 15V \pm 5\%$,
 $I_c < 20mA$
 $V_{is} < 10mA$
 $R_{is} > 500 M\Omega$

Electrical Data/Output

Output Voltage at I_r , $T_A=25^\circ C$:
Output Impedance:
Load Resistor:

$V_{out} = 4V$
 $R_{out} < 150\Omega$
 $R_L > 10k\Omega$

Accuracy

Accuracy at I_r , $T_A=25^\circ C$ (without offset),
Linearity from 0 to I_r , $T_A=25^\circ C$,
Electric Offset Voltage, $T_A=25^\circ C$,
Magnetic Offset Voltage ($I_r \rightarrow 0$)
Thermal Drift of Offset Voltage,
Thermal Drift ($-10^\circ C$ to $50^\circ C$),
Response Time at 90% of I_p ($f=1k$ Hz)
Frequency Bandwidth (-3dB),

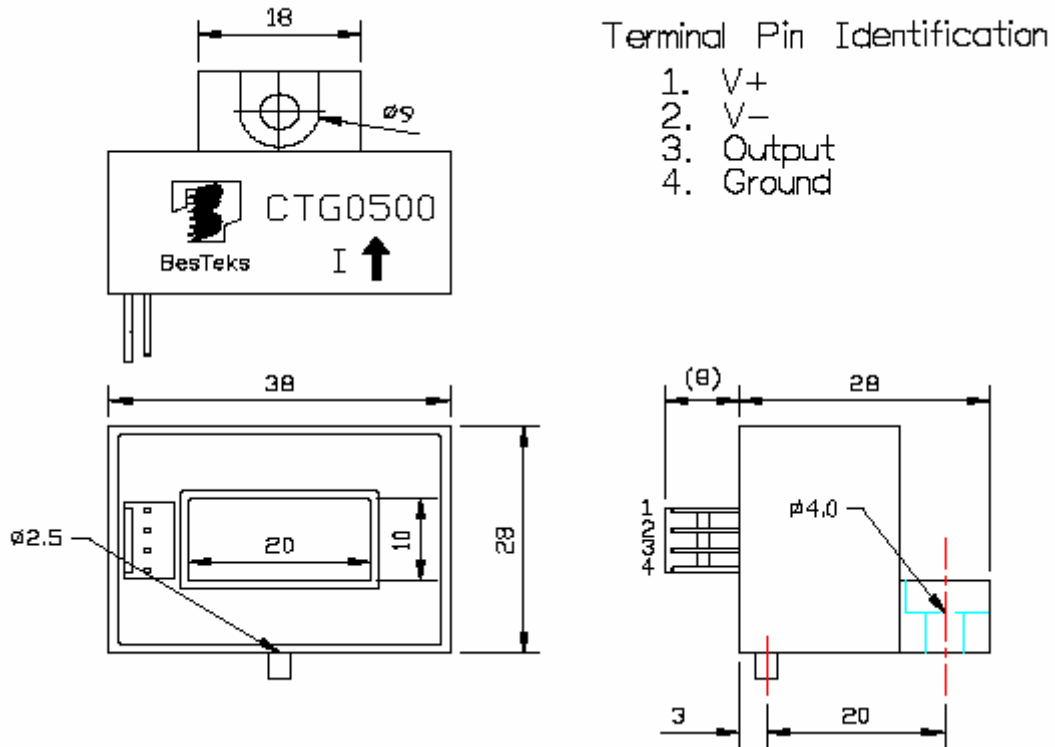
$X < 1.0\%$
 $E_L < 1.0\%$
 $V_{oe} < 40mV$
 $V_{om} < \pm 15mV$
 $V_{ot} < 2mV/^\circ C$
T.C. $< \pm 0.1\% /^\circ C$
 $t_r < 3\mu s$
 $f_b = 50$ kHz

General Data

Ambient Operating Temperature,
Ambient Storage Temperature,

$T_A = -10^\circ C \sim +80^\circ C$
 $T_S = -25^\circ C \sim +85^\circ C$

PIN Definition and Dimensions



Connection

