

Topstek Current Transducer TGH3A .. TGH30A-SP2

TGH 3A~30A-SP2

Features

- ◆ Highly reliable Hall Effect device
- ◆ Compact and light weight
- ◆ Fast response time
- ◆ Excellent linearity of the output voltage over a wide input range
- ◆ Excellent frequency response (> 50 kHz)
- ◆ Low power consumption (10 mA nominal)
- ◆ Capable of measuring both DC and AC, both pulsed and mixed
- ◆ High isolation voltage between the measuring circuit and the current-carrying conductor (AC2.5KV)
- ◆ Extended operating temperature range
- ◆ Flame-Retardant plastic case and silicone encapsulate, using UL classified materials, ensures protection against environmental contaminants and vibration over a wide temperature and humidity range

Applications

- ◆ UPS systems
- ◆ Industrial robots
- ◆ NC tooling machines
- ◆ Elevator controllers
- ◆ Process control devices
- ◆ AC and DC servo systems
- ◆ Motor speed controller
- ◆ Electrical vehicle controllers
- ◆ Inverter-controlled welding machines
- ◆ General and special purpose inverters
- ◆ Power supply for laser processing machines
- ◆ Controller for traction equipment e.g. electric trains
- ◆ Other automatic control systems



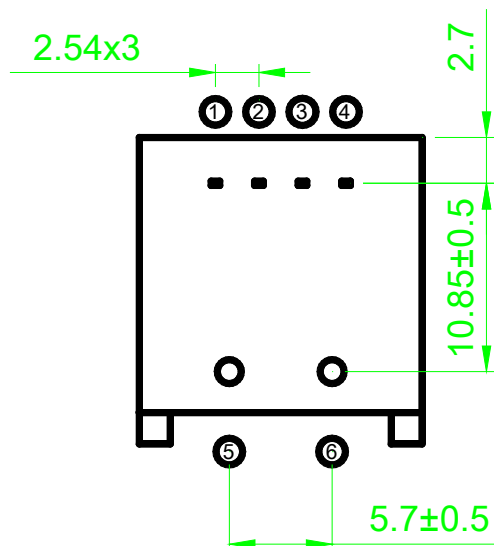
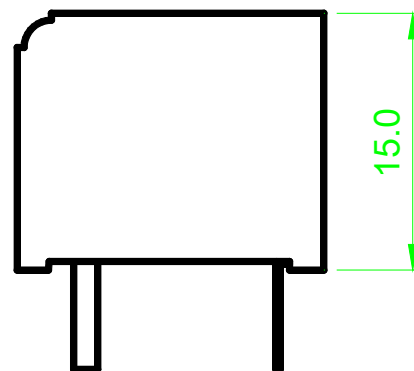
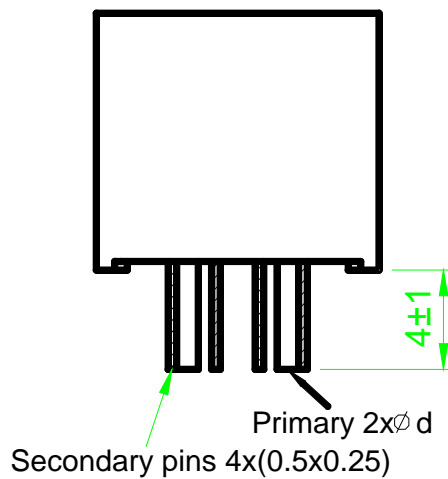
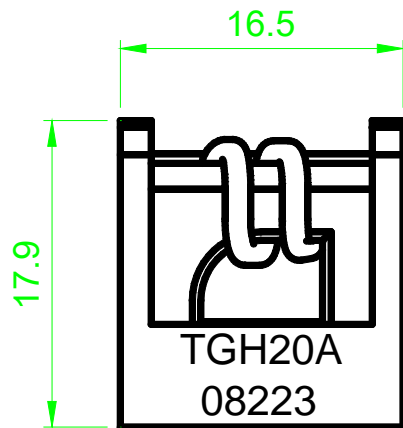
Specifications

Parameter	Symbol	Unit	TGH3A .. TGH30A-SP2
Nominal Input Current	I_{fn}	A DC	3 .. 30
Linear Range	I_{fs}	A DC	$\pm 9 \dots \pm 90 = 3 \times I_{fn}$
Nominal Output Voltage	V_{hn}	V	4 V $\pm 1\%$ @ $I_f = I_{fn}$ ($V_{CC}/V_{EE} = \pm 15V$, $R_L = 10k\Omega$)
Offset Voltage	V_{os}	mV	Within ± 40 mV @ $I_f = 0$ ($T_a = 25^\circ C$, $V_{CC}/V_{EE} = \pm 15V$, $R_L = 10k\Omega$)
Output Resistance	R_{OUT}	Ω	$< 100\Omega$
Hysteresis Error	V_{oh}	mV	Within ± 15 mV @ $I_f = I_{fn} \rightarrow 0$
Supply Voltage	V_{CC}/V_{EE}	V	Nominal: $\pm 15V \pm 5\%$, Extended range: $\pm 14V \sim \pm 18V$ (Output accuracy $< \pm 2\%$ @ $V_{CC}/V_{EE} = \pm 18V$)
Linearity	ρ	%	Within $\pm 1\%$ of I_{fn}
Consumption Current	I_{CC}	mA	± 10 mA nominal, ± 14 mA max
Response Time (90% V_{hn})	T_r	μsec	5 μsec max. @ $dI_f/dt = I_{fn}/\mu sec$
Frequency bandwidth (-3dB)	f_{BW}	Hz	DC to 50kHz
Thermal Drift of Output	-	$\%/^\circ C$	Within $\pm 0.1 \%/^\circ C$ @ I_{fn}
Thermal Drift of Zero Current Offset	-	$mV/^\circ C$	Within $\pm 1.5 mV/^\circ C$ @ I_{fn}
Dielectric Strength	-	V	AC2.5KV X 60 sec
Isolation Resistance @ 1000 VDC	R_{IS}	$M\Omega$	$> 1000 M\Omega$
Operating Temperature	T_a	$^\circ C$	$-40^\circ C$ to $90^\circ C$
Storage Temperature	T_s	$^\circ C$	$-40^\circ C$ to $95^\circ C$
Mass	W	g	8 g

Topstek Current Transducer TGH3A .. TGH30A

Appearance, dimensions and pin identification

All dimensions in mm ± 0.5 , holes -0 , $+0.2$ except otherwise noted.



①	-15V
②	0V
③	+15V
④	V _{OUT}
⑤	I ₊
⑥	I ₋

Primary Current Input Pin Diameter	3A	5A	6A-10A	11A-17A	18A-24A	25A-30A
d(mm)	0.6	0.7	1.0	1.2	1.4	1.6



Additional Information :

한국 대리점 : (주)디웰전자 (Diwell Electronics Co., Ltd.)

경기도 군포시 당정동 358 군포창업보육센터 202호

202, Kunpo Business Incubator Center, 358,

Dangjung-Dong, Gunpo-City, Gyeonggi-Do, South Korea

Phone : 070-8235-0820 (+82-70-8235-0820)

Fax : 031-429-0821 (+82-31-429-0821)

기술 및 구매 문의 email : expoeb2@diwell.com,

dsjeong@diwell.com