Topstek Current Transducers TD25A .. TD400A

TD 25A~400A



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 (12 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

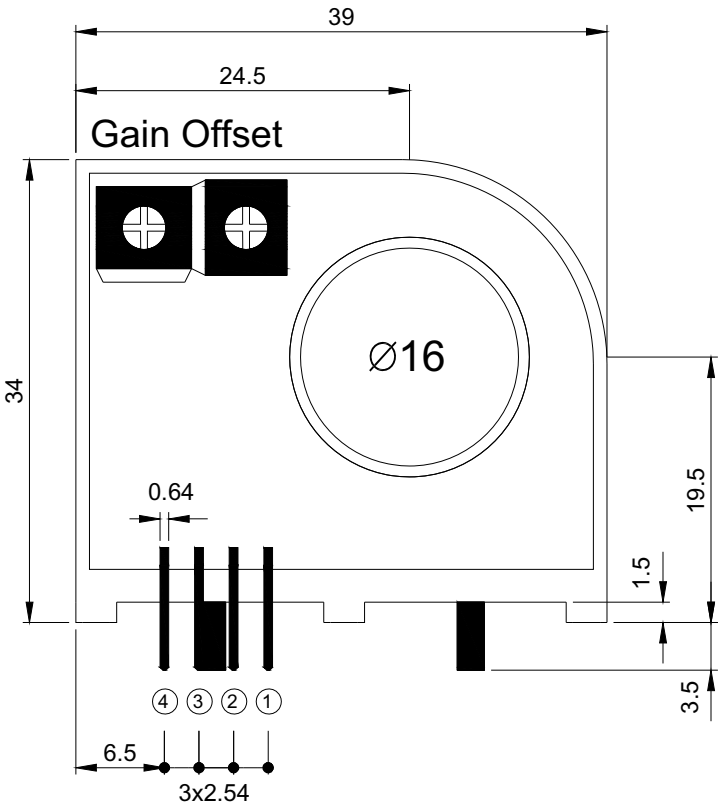
Parameter	Symbol	Unit	TD 25A	TD 50A	TD 75A	TD 100A	TD 125A	TD 150A	TD 175A	TD 200A	TD 250A	TD 300A	TD 350A	TD 400A
Nominal Input Current	I_{fn}	A DC	25	50	75	100	125	150	175	200	250	300	350	400
Linear Range	I_{fs}	A DC	±75	±150	±225	±300	±375	±450	±525	±525	±550	±550	±550	±600
Nominal Output Voltage	V_{hn}	V	4 V±1% at If=I_{fn} (R_L=10kΩ)											
Offset Voltage	V_{os}	mV	Within ±35 mV @ I_f=0, T_a=25°C											
Output Resistance	R_{OUT}	Ω	<100Ω(50Ωnominal)											
Hysteresis Error	V_{oh}	mV	Within ±35 mV @ I_f=I_{fn}→0											
Supply Voltage	V_{CC}/V_{EE}	V	±15V ±5%											
Linearity	ρ	%	Within ±1% of I_{fn}											
Consumption Current	I_{CC}	mA	±12 mA nominal, ±15 mA max											
Response Time (90%V_{hn})	T_r	μsec	7 μsec max. @ $d I_f/dt = I_{fn}$ / μsec											
Frequency bandwidth (-3dB)	f_{BW}	Hz	DC to 50kHz											
Thermal Drift of Output	-	%/°C	Within ±0.05 %/°C @ I_{fn}											
Thermal Drift of Zero Current Offset	-	mV/°C	Within ±1.5 mV/°C @ I_{fn}											
Dielectric Strength	-	V	AC2.5KV X 60 sec											
Isolation Resistance @ 1000 VDC	R_{IS}	MΩ	>1000 MΩ											
Operating Temperature	T_a	°C	-15°C to 80°C											
Storage Temperature	T_s	°C	-20°C to 85°C											
Mass	W	g	28 g											

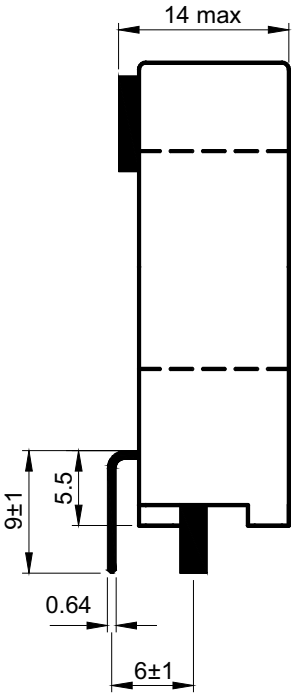
Appearance, dimensions and pin identification

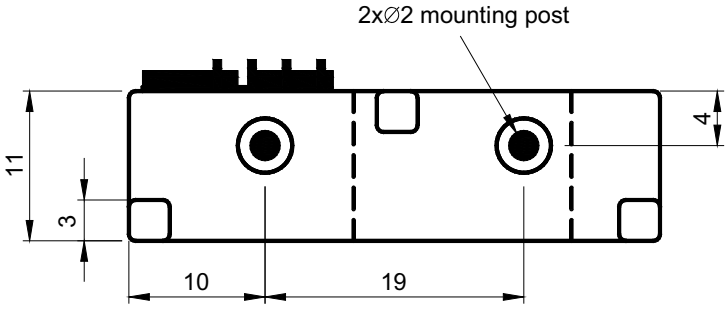
All dimensions in mm ±0.1, holes –0, +0.2 except otherwise noted.











Pin Assignment	
1	+15V
2	-15V
3	VOUT
4	0V