

## 1. Description

The TD Series Current Sensors are closed loop Hall effect current sensors that accurately measure DC and AC current and provide electrical isolation between the primary current and the output of the sensor.

## 2. Electrical Specifications

Type		See Table 1
Primary nominal current	AT	See Table 1
Primary current,measuring range	AT	See Table 1
Nominal analog output current	V	4
Supply Voltage	V	$\pm 14V$ to $\pm 16V$
Overall Accuracy at 25°C		$\pm (1\% + \text{Zero current offset})$
Dielectric strength r.m.s / 60Hz / 1 min	kV	2.5

## 3. Accuracy-Dynamic Performance

Zero current offset at 25°C	mV	$\pm 30$
Offset current temperature drift Between -20~80°C	mV	$\pm 50$
Linearity	%	better than 0.3
Response time	ms	less than 1
Bandwidth between 0 to 50kHz between 0 to 100kHz	%	$\pm 5$ $\pm 10$

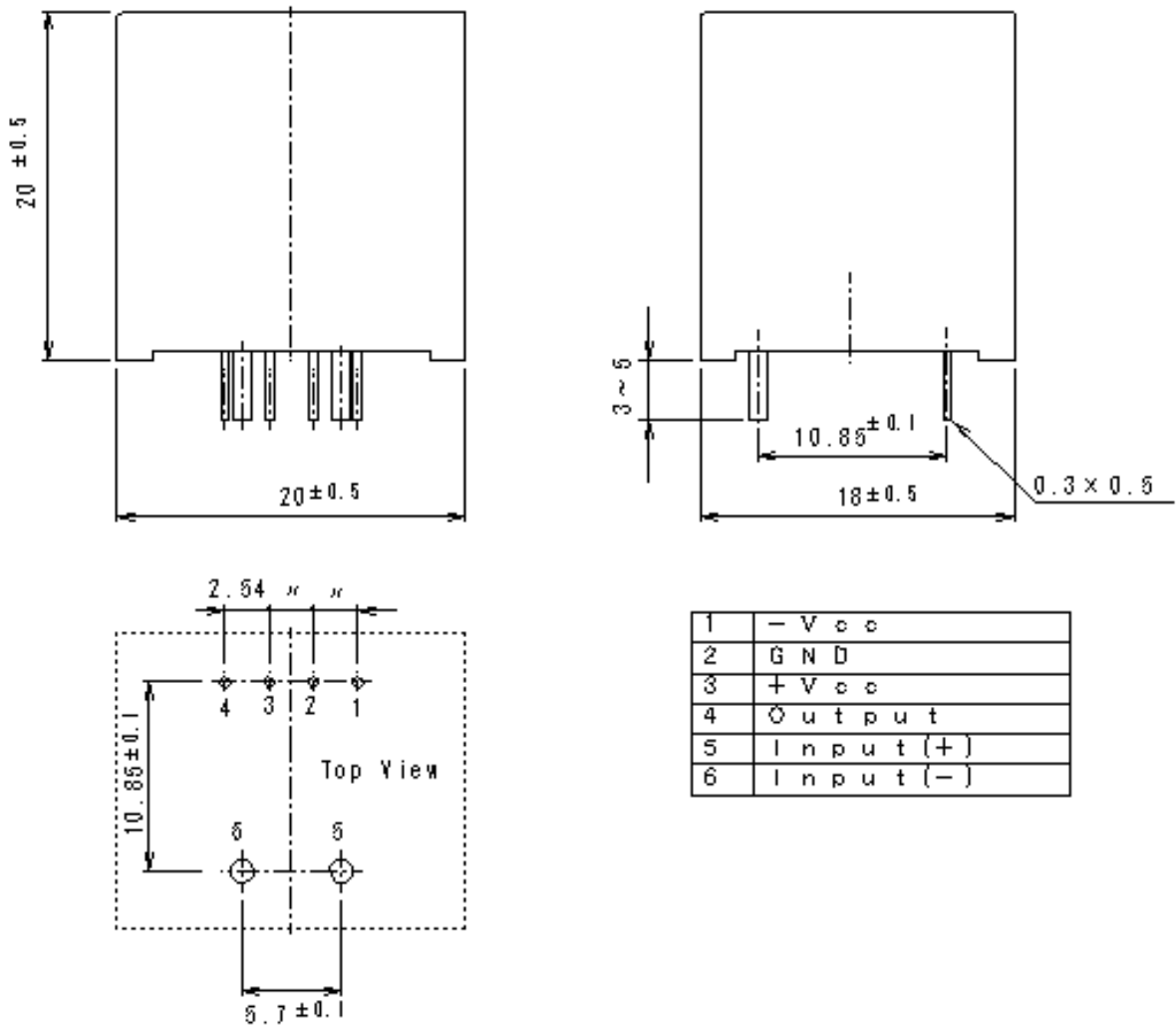
## 4. General information

Operating temperature	°C	-20~+80
Storage temperature	°C	-40~+80
Current drain	mA	See Table 1
Weight	grams	16~18
Package		Flame retarded plastic case UL94-V0
Mounting		Designed to mount on PCB via thru hole connection pins

Table 1

Type	Nominal current [AT]	Measuring range [AT]	Current drain [mA]
TD 049V	4.9	12.2	$\pm 10 \sim \pm 41$
TD 052V	5.2	13.0	$\pm 10 \sim \pm 41$
TD 073V	7.3	18.3	$\pm 10 \sim \pm 41$
TD 092V	9.2	22.9	$\pm 10 \sim \pm 41$
TD 095V	9.5	23.7	$\pm 10 \sim \pm 41$
TD 122V	12.2	30.5	$\pm 10 \sim \pm 41$
TD 138V	13.8	34.4	$\pm 10 \sim \pm 41$
TD 168V	16.8	42.0	$\pm 10 \sim \pm 43$
TD 183V	18.3	45.8	$\pm 10 \sim \pm 43$
TD 229V	22.9	57.3	$\pm 10 \sim \pm 43$
TD 276V	27.6	69.0	$\pm 10 \sim \pm 43$
TD 321V	32.1	80.2	$\pm 10 \sim \pm 43$
TD 412V	41.2	103.0	$\pm 10 \sim \pm 53$
TD 520V	52.0	130.0	$\pm 10 \sim \pm 65$
TD 540V	54.0	135.0	$\pm 10 \sim \pm 65$

**5. Dimensions in mm**



**6. Materials**

①	Case	Glass-filled PBT UL94-V0 Mitubisi 5010GN3-15	See 7-1
②	Bobin	Glass-filled PBT UL94-V0 Mitubisi 5010GN3-15	See 7-1
③	Magnet Wire	Polyurethane UL TI 130°C DAIICHI DENKO UEWSU	See 7-2
④	Core	Permalloy	
⑤	Adhesive	Epoxy Casting Compound UL94-V0 NAGASE CHEMTEX CORP XNR4109/XNH4109	See 7-3
⑥	P.C.B	FR-4 0.8t UL94-V0 CMK.CORP CMK-G2X	See 7-4

