TBV05/10ASR3.3 series current mode voltage sensor is a closed loop device based on the principle of the hall effect and null balance method. The output from the voltage sensor can be expressed as a voltage by passing it through a resister. Input voltage can be expressed as a current by passing it through an input resister. It provides accurate electronic measurement of DC AC or pulse and to take all kinds of irregular voltage waveform.

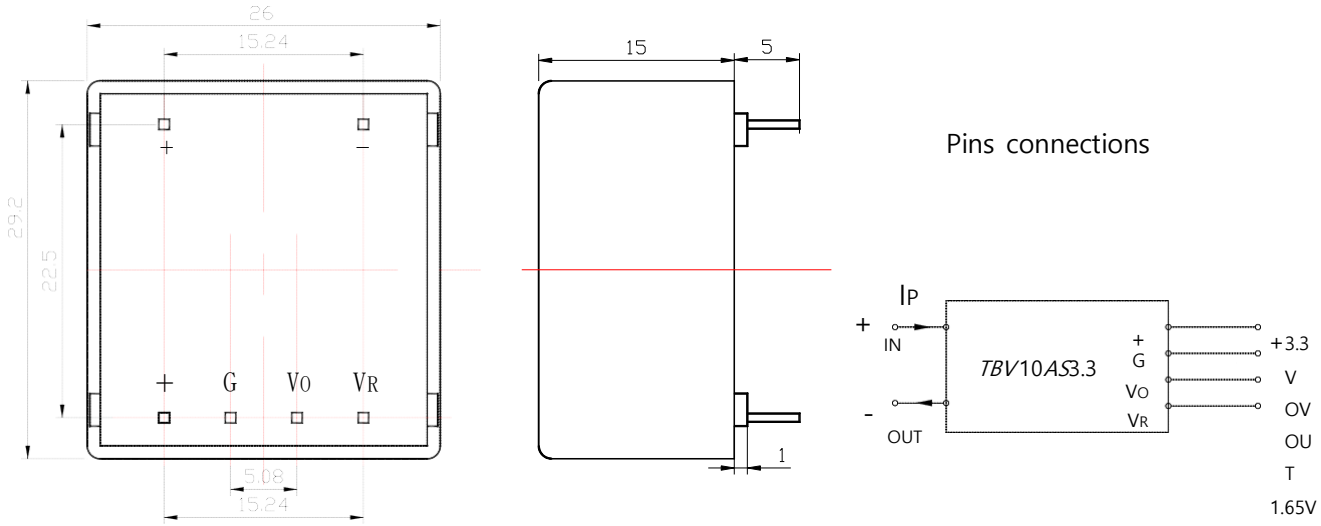
Electrical data (Ta=25℃±5℃)

Parameter \ Type	TBV05ASR3.3	TBV10ASR3.3	Unit
Rated input (Ipn)	±5.0	±10	mA
Measure range (Ip)	±10	±20	mA
Turns ratio (Np/Ns)	500:800	250:800	T
Measure resister of inside	200±0.1% 25PPM/℃	200±0.1% 25PPM/℃	Ω
Rated output voltage	@Ip=±Ipn ±0.625±0.5%		V
Supply voltage	+3.3±5%		V
Consumption current	20+IpX (Np/Ns)		mA
Reference voltage	1.65±0.5%		V
Zero voltage	@ Ip=0 1.65±0.5%		V
Offset drift	≤±0.2		mV/℃
Linearity	@ Ip=0-±Ipn ≤0.1		%FS
Response time	≤40		μS
Galvanic isolation	@ 50HZ, AC,1min 2.5		KV

Applications

- Variable speed drives
- Welding machine
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Electrochemical

Mechanical dimension (for reference only)



Remarks :

1. All dimensions are in mm.
2. General tolerance ±1mm

Directions for use

1. When the current will be measured goes through a sensor, the voltage will be measured at the output end. (Note: The false wiring may result in the damage of the sensor).
2. Custom design in the different rated input current and the output voltage available.

Standards

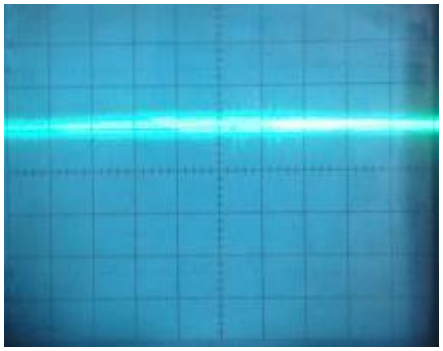
- UL94-V0
- EN60947-1:2004
- IEC60950-1:2001
- EN50178:1998
- SJ 20790-2000

General data

	Value	Unit	Symbol
Operating temperature	-40 to +85	ºC	TA
Storage temperature	-40 to +125	ºC	TS
Mass(about)	21	g	M

Characteristics chart

Effects of impulse noise



⇦ (Output voltage)

≤1uS