

The ATBV5-10/25A series current mode voltage sensor is a device based on the principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It provides accurate electronic measurement of DC AC or pulsed currents

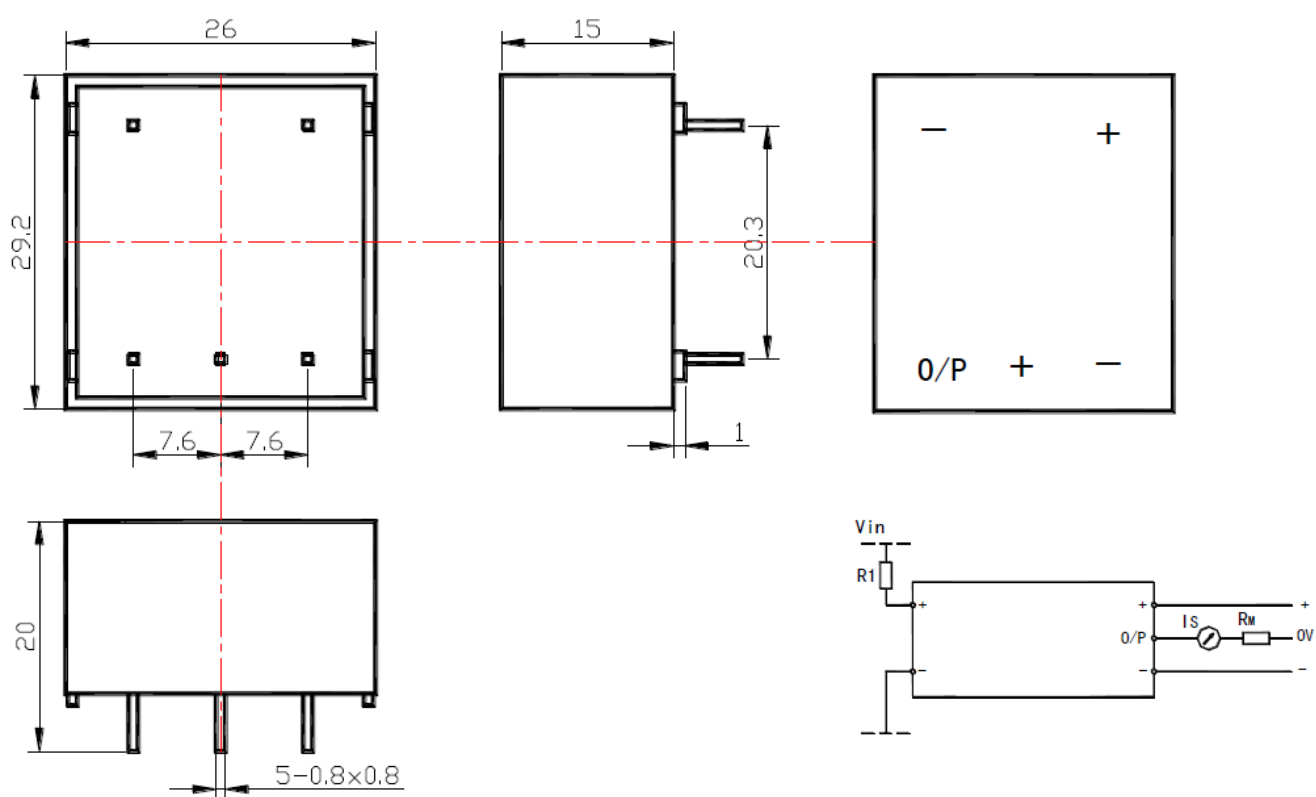
基本仕様 (Ta=25°C±5°C)

項目/型式	ATBV5/25A	ATBV10/25A	単位
定格電流 (I _{pn}) Rated input (I _{pn})	5	10	mA
最大許容電流 (I _p) Measure range (I _p)	7	14	mA
変流比 (N _p /N _s) Turns ratio (N _p /N _s)	5000:1000	2500:1000	T
1次側コイル抵抗 Primary coil resister	650	200	Ω
2次側コイル抵抗 Secondary coil resister	110	110	Ω
測定抵抗 Measure resister	±15V @ (±5) ±10mA _{max} 100(min) 350(max) @ (±7) ±14mA _{max} 100(min) 190(max)		Ω
定格出力電流 Rated output (I _{sn})	@I _p =±I _{pn}	±25±0.5%	mA
電源電圧 Supply voltage	±15±5%		V
消費電流 Power consumption	20+I _p X (N _p /N _s)		mA
ゼロ点オフセット電流 Zero offset current	@I _p =0	±0.2	mA
オフセット温度ドリフト Offset current drift	@ -40°C~85°C	±0.5	mA
応答速度 Response time	40		us
直線性 Linearity	@I _p =0-±I _{pn}	≤0.2	%FS
絶縁耐圧 Galvanic isolation	@ 50Hz, AC, 1min	2.5	KV

アプリケーション

- AC variable speed drives and servo motor drives
- Static converters for DC motor drives
- Variable speed drives
- Power supplies for welding applications
- Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)

外形図



- ・すべての単位は mm
- ・寸法誤差 ±1mm

使用説明

1. The accuracy of sensor will be the best when the current passes through resistor R1 and becomes the rated primary current, and therefore the current to be measured by sensor should comply with the primary current 10mA.
2. 例：測定電圧 VIN=250V For example, VIN=250V:
 精度 (Accuracy) = ±0.8% of VIN (@Ta=+25°C) a) R1=25KΩ /10W, IP =10mA
 精度 (Accuracy) = ±1.6% of VIN (@Ta=+25°C) b) R1=50KΩ / 5W, IP =5mA
3. Considering resistance of primary coil (compared with R1 and temperature difference kept as low as possible) and electrical isolation within measure range (recommended), this sensor is suitable for measuring voltage.

適合標準

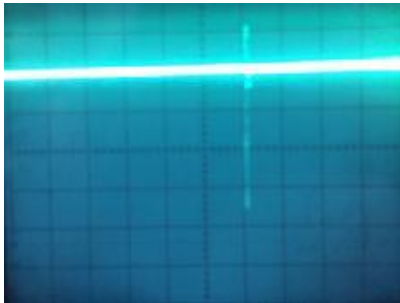
- UL94-V0.
- EN60947-1:2004
- IEC60950-1:2001
- EN50178:1998
- SJ 20790-2000

標準データ

	数値	単位
動作温度	-40 to +85	°C
保存温度	-40 to +125	°C
重量	20	g

特性チャート

インパルスノイズの影響

出力電圧
(Output voltage)