



TKC-BSFR52 series current sensor is an open loop device based on the measuring principle of the hall effect, with a galvanic isolation between primary and secondary circuit. It provides accurate electronic measurements of DC, AC or pulse currents.

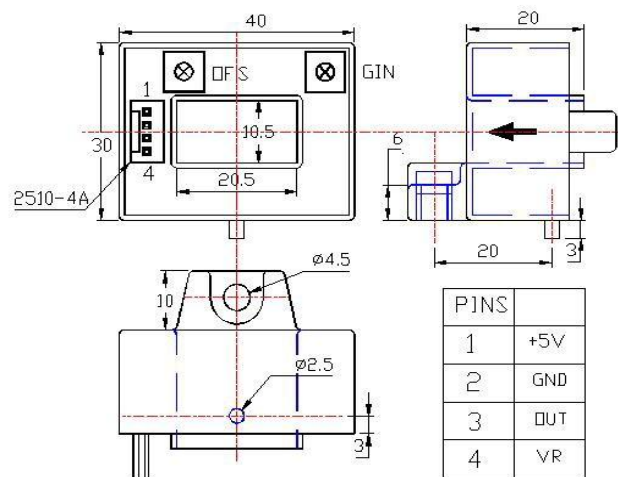
Electrical data (Ta=25°C±5°C, RL=2KΩ, CL=1000PF)

Parameter \ Type	TKC50 BSFR52	TKC100 BSFR52	TKC200 BSFR52	TKC300 BSFR52	TKC400 BSFR52	TKC500 BSFR52	TKC600 BSFR52	Unit	
Rated input (Ipn)	±50	±100	±200	±300	±400	±500	±600	A	
Measure range	±55	±110	±220	±330	±440	±550	±660	A	
Rated output	@I _p =±I _{pn} ±2±1%							V	
Zero voltage	@I _p =0 2.5±0.5%							V	
Reference voltage	2.5±0.5%							V	
Supply voltage	+5±5%							V	
Power Consumption	≤20							mA	
Zero offset voltage	≤±20							mV	
Magnetic offset	±15	±10							mV
Offset drift	≤±1.5	≤±1.0							mV/°C
output drift	≤±1.5	≤±1.0							mV/°C
Linearity	@I _p =0-±I _{pn} ≤1							%FS	
Response time	@50A/μS, 10%-90% ≤3							μS	
Bandwidth	@-3dB DC-25							KHz	
Galvanic isolation	@ 50HZ,AC,1min 2.5							KV	

Applications

- AC variable speed 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)

Mechanical dimension (for reference only)



Remarks :

1. All dimensions are in mm.
2. General tolerance $\pm 1\text{mm}$.

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 damage of the sensor)
2. Customs can adjust Output amplitude of the sensor by needs.
3. Custom design in the different rated input current and output voltage are available.

Standards

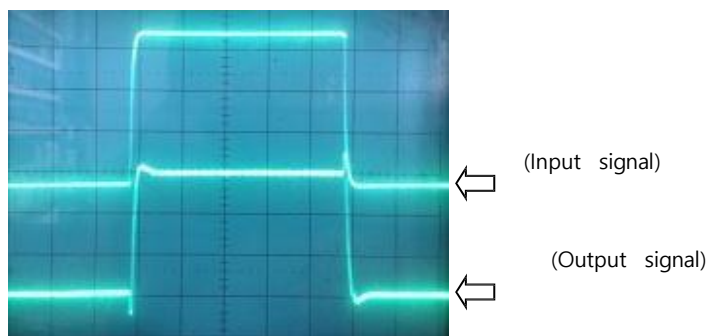
UL94-V0
 EN60947-1:2004
 IEC60950-1:2001
 EN50178:1998
 SJ 20790-2000

General date

	Value	Unit	Symbol
Operating temperature	-40 to +105	°C	TA
Storage temperature	-40 to +125	°C	TS
Mass(approx.)	65	g	M

Characteristics chart

Pulse current signal response characteristic



Effects of impulse noise

