



TKC-F51series 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 measurement of DC, AC or pulsed currents.

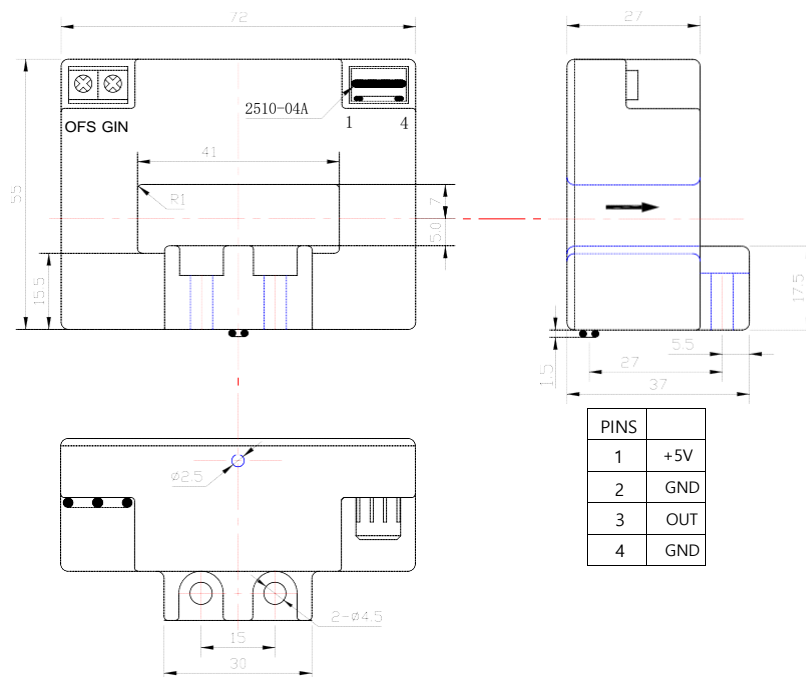
Electrical data (Ta=25°C±5°C,RL=2KΩ,CL=10000PF)

<div>Type</div> <div>Parameter</div>	TKC 100F51	TKC 300F51	TKC 500F51	TKC 600F51	TKC 800F51	TKC 1000F51	TKC 2000F51	Unit
Rated input (Ipn)	±100	±300	±500	±600	±800	±1000	±2000	A
Measure range(Ip)	±200	±600	±1000	±1200	±1600	±2000	±3000	A
Rated output	@Ip=±Ipn ±1±1%							V
Supply voltage	+5±5%							V
Power Consumption	+18							mA
Zero voltage	@Ip=0 2.5±0.5%							V
Offset voltage	@Ip=0 ≤±15							mV
Magnetic offset	@Ip=±Ip	≤±20						mV
Offset drift	≤±0.5 (Typ)	≤±0.75 (Max)						mV/°C
output drift	≤±0.5 (Typ)	≤±0.75 (Max)						mV/°C
Linearity	@Ip=0-±Ipn ≤1							%FS
Response time	@50A/μ S, 10%-90% ≤5							μ S
Bandwidth	@-3dB DC-25							KHz
Galvanic isolation	@ 50HZ,AC,1min 5.0							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 ± 1 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 the damage of the sensor)
2. Customs can adjust the output amplitude of the sensor by needs.
3. Custom design in the different rated input current and the output voltage are available.

Standards

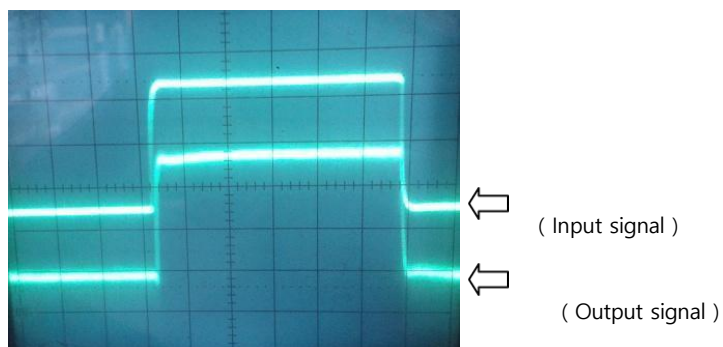
UL94-V0.
EN60947-1:2004
IEC60950-1:2001
EN50178:1998
SJ 20790-2000

General data

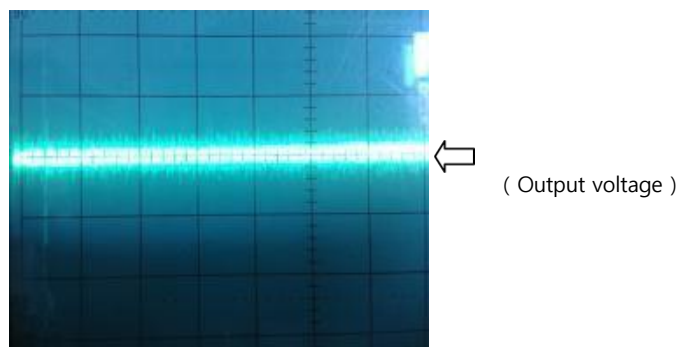
	Value	Unit	Symbol
Operating temperature	-40 to +105	°C	TA
Storage temperature	-40 to +125	°C	TS
Mass(approx)	218	g	M

Characteristics chart

Pulse current signal response characteristic



Effects of impulse noise



Input current-Output Voltage characteristic

10mV/格

TKC-F51 SERIES
PrimaryCurrent(Ip)--Output(V)
+5V

