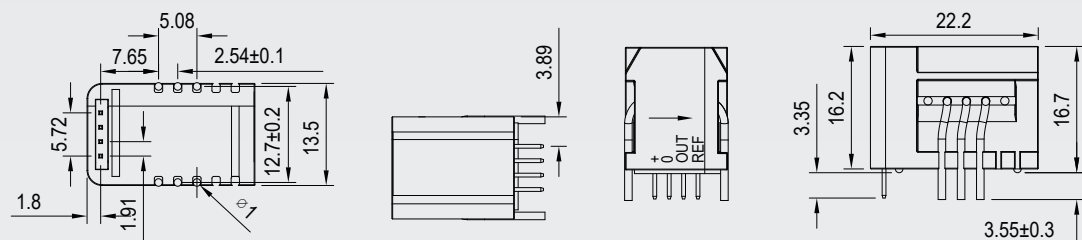


PCB level current senso

# CAFR SERIES

CAFR-6A-NP~CAFR-50A-NP



Product model	CAFR-6A-NP	CAFR-15A-NP	CAFR-25A-NP	CAFR-50A-NP
Primary rated current/ $I_{PN}$	±6	±15	±25	±50
Primary current measurement range/ $I_{PM}$	±20	±51	±85	±150
Power consumption current/ $I_c$	19mA	24mA	39mA	65mA
Output voltage/ $V_{out}$	$V_{out}=(V_c/5) \times (2.5+G_{th} \times I_p)$	$V_{out}=(V_c/5) \times (2.5+G_{th} \times I_p)$	$V_{out}=(V_c/5) \times (2.5+G_{th} \times I_p)$	$V_{out}=(V_c/5) \times (2.5+G_{th} \times I_p)$
Theoretical gain/ $G_{th}$	104.2	41.67	25	12.5
Accuracy/ $X_G$	±0.8%	±0.8%	±0.8%	±0.8%
Linearity/ $\epsilon_L$	±0.1	±0.1	±0.1	±0.1
Bandwidth/ $BW(\pm 1dB)$	200kHz	200kHz	200kHz	200kHz
Bandwidth/ $BW(\pm 3dB)$	300kHz	300kHz	300kHz	300kHz
Response time/ $t_r$	0.3µs	0.3µs	0.3µs	0.3µs
Maximum zero error voltage/ $V_{OE}$	±5.3mV	±2.21mV	±1.35mV	±0.725mV
Supply voltage/ $V_c$	+5V	+5V	+5V	+5V
Operating temperature/ $T_A$	-40°C~80°C	-40°C~80°C	-40°C~80°C	-40°C~80°C
Installation method	Direct welding	Direct welding	Direct welding	Direct welding
Weight	9g	9g	9g	9g



## TYPICAL APPLICATION

CAFR series - Typical applications

### © Rail transit

Preventive maintenance of major locomotive equipment (switch machine, PSD, signal system rail, etc.) is critical to reducing the disruption of locomotive service caused by equipment failure and lowering life cycle costs. Online monitoring allows for key preventive actions before any abnormalities that cause defects occur.

Sensors, for example, can monitor the motor current of a switch machine. The current deviation from the normal range indicates that equipment may fail and that preventive maintenance is required. Timely scheduled maintenance can avert track interruptions, saving significant costs.

Typical trackside applications include: track target monitoring/switch machine/track circuit/screen door/substation (circuit breaker of transformer...)

### © Driver

Current sensors are used in elevators, forklifts, machine tools, robots, and all equipment using industrial motor drives to achieve efficient control, regulation, energy conservation, and comfort functions. Driver control requires dependable and accurate current measurement to enable engineers to create systems with isolated current measurements directly on the motor phase.

The sensors are used to measure constantly changing currents for feedback purposes. This results in precise modifications to the equipment operation. For machine tools, when the tool starts working on the parts to be processed, the current quickly increases. The better and faster the feedback signal, the smoother device information control.

