

# CT110

High Linearity, High-Resolution TMR Contact Current Sensor

## CT110: Key Advantages of Superior Sensing Solution

Total Output Error < 0.5% FS (Typical)

High Resolution – Senses Current as Low as 5 mA

2 kV Isolation

Plug-and-Play Solution for Design Simplicity

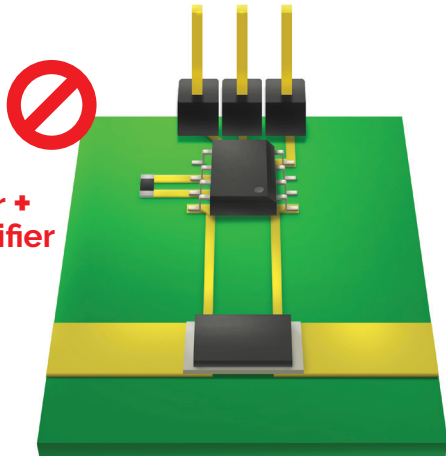
Miniature Form Factor: 6-lead DFN, 3.00 x 3.00 x 0.95 mm

### Features

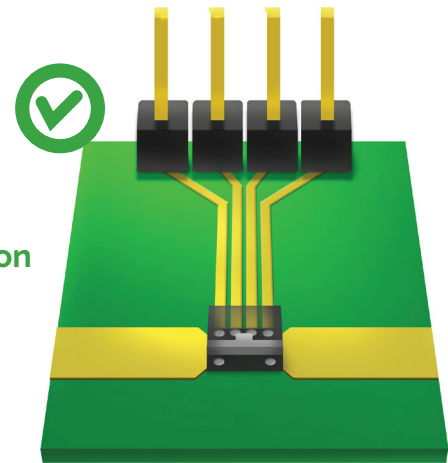
- > AC or DC Current Range:
  - +5.0 A<sub>DC</sub> / ±5.0 A<sub>PK</sub>
  - +10.0 A<sub>DC</sub> / ±10.0 A<sub>PK</sub>
  - ±15.0 A<sub>PK</sub>
- > Linear Ratio-metric Analog Output @ f<sub>s</sub> = 200 kHz
- > Supply Current: ~1.2 mA
- >  $\overline{\text{FLAG}}$  Pin to Indicate 90% and 10% of Full Current Range
  - Active LOW Digital Output (Push-pull)
- > Supply Voltage: 2.7 V to 5.5 V

### CT110: Ideal Replacement for Shunt Resistor + Isolated Amplifier System








**Shunt Resistor +  
Isolated Amplifier  
System**



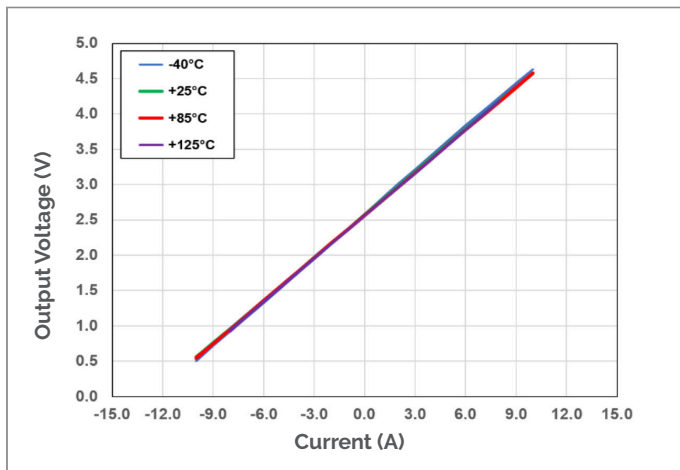
**The  
CT110  
Solution**



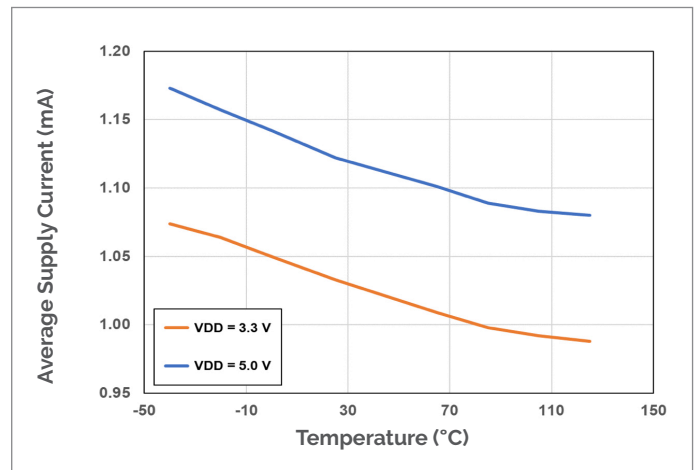
### CT110 Applications

					
LED LIGHTING	SMALL APPLIANCES	POWER TOOLS	OUTDOOR PRODUCTS	SMART IOT DEVICES	UAV/DRONES
					
SMART APPLIANCES	PLC'S/CONTROL BOARDS	SMPS	FLOOR CARE PRODUCTS	HOT SWAP SYSTEMS	CAR POWER INVERTERS

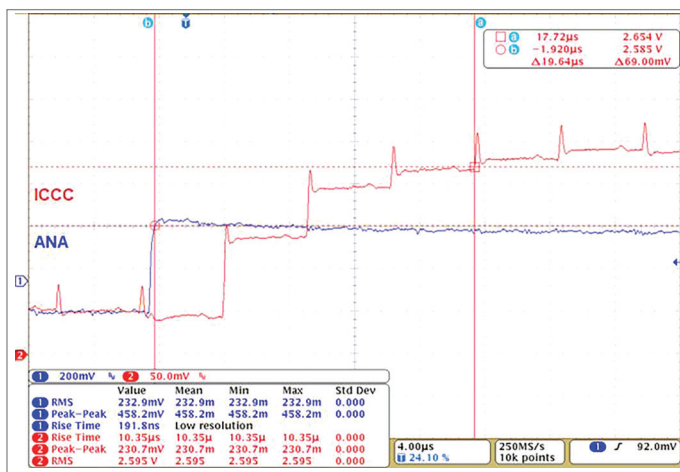
# CT110: High Linearity, High-Resolution TMR Contact Current Sensor



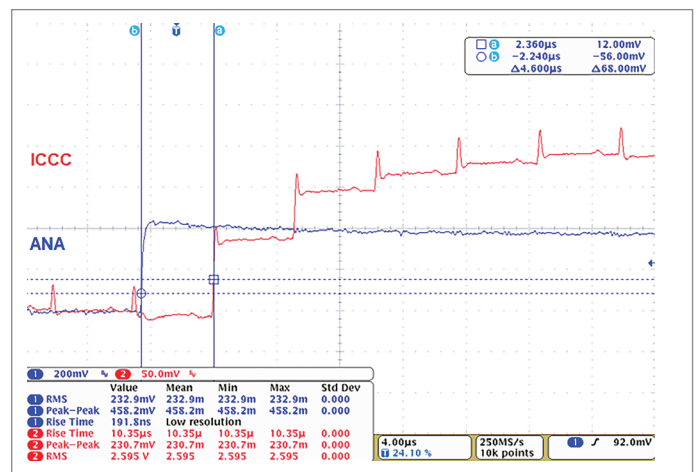
Output Voltage vs. Current vs. Temperature



Average Supply Current vs Temperature vs. Supply Voltage



CT110 Response Time



CT110 Propagation Delay

Part Number	Current Range	Package	Operating Temperature Range
CT110FDC-ID6	+5.0 A <sub>DC</sub> / ±5.0 A <sub>PK</sub>	6-lead DFN 3.00 x 3.00 x 0.95 mm	-40°C to +85°C
CT110FDC-HD6			-40°C to +125°C
CT110FDV-ID6			-40°C to +85°C
CT110FDV-HD6			-40°C to +125°C
CT110PDC-ID6	+10.0 A <sub>DC</sub> / ±10.0 A <sub>PK</sub>	6-lead DFN 3.00 x 3.00 x 0.95 mm	-40°C to +85°C
CT110PDC-HD6			-40°C to +125°C
CT110PDV-ID6			-40°C to +85°C
CT110PDV-HD6			-40°C to +125°C
CT110RMC-ID6	±15.0 A <sub>PK</sub>	6-lead DFN 3.00 x 3.00 x 0.95 mm	-40°C to +85°C
CT110RMC-HD6			-40°C to +125°C
CT110RMV-ID6			-40°C to +85°C
CT110RMV-HD6			-40°C to +125°C