



# Split Core Current Switch

The **CR9380** series is a low cost, self powered, fixed set-point Current Switch designed for applications that require an on-off indication of current flow.

Current levels above the guaranteed full-on level will turn the output to full on. The Current Switch is recommended only for applications where the continuous operating current is above the rated full on level of 350 mA. Operation below this point will not drive the output device full-on and derate the output ratings.

The unit is available with a NPN or PNP output transistor for switching DC and a SCR output for switching AC. Connections can be made directly to items such as a PLC or electromechanical relay. Note that connections made directly to an inductive device such as an electromechanical relay will require a customer supplied clamping diode for DC operation or a snubber network for AC operation.



## Features

- Low cost
- Low fixed trip point
- Fully isolated
- Reverse output polarity protected
- Self-powered

## Specifications \*

**Rated full-on:** 0.350 Aac RMS

**Turn-on time:**

100 ms max. @ rated full-on

**Turn-off time:**

250 ms. max. to 80% of  $V_{ce}$

**Maximum sense current:**

Continuous: 100 Aac

1 Second: 500 Aac

**Frequency: \***

50 to 400 Hz

**Operating Temperature:**

-30 °C to +60 °C

**Storage Temperature:**

-55 °C to +85 °C

## DC Switching (-NPN or -PNP)

**$V_{ce}$  (full off):** 30 Vdc max.

**$I_{sink}$  (full on):** 120 mAac max. @ rated full-on

**$V_{ce}$  (reverse polarity voltage):** 1.2 Vdc @ 100 mA dc

**$V_{ce}$  (full on):** 1.5 Vdc @ 120 mAac  $I_{sink}$

**Off state leakage current:** 5ua @ 30 Vdc (typical)

## AC Switching (-ACA)

**Off state voltage:** 240 Vac RMS max.

**Minimum switch voltage:** 24 Vac RMS

**On state current:** 1.0 Aac RMS max. continuous

**Off state leakage:** 50 ua @ 240 Vac max.

**Peak Non-Repetitive Surge Current:**

8 Aac RMS (1 cycle, 60 Hz.)

\*All specifications for operation at 60 Hz only

## Part Number

**CR**□□□□ - □□□ **CURRENT SWITCH**

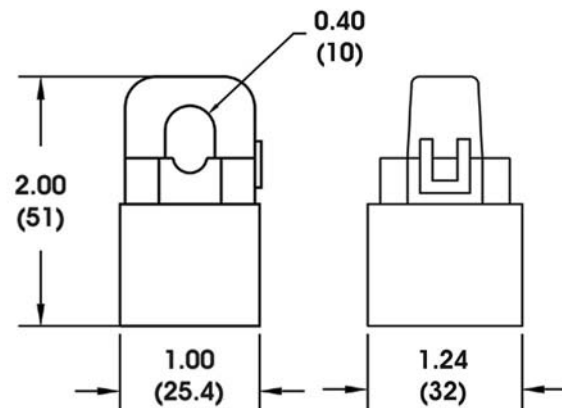
**NPN** - Transistor output

**PNP** - Transistor output

**ACA** - AC Output

**9380** - Split Core

## Outline Drawing



## Electrical Connections

