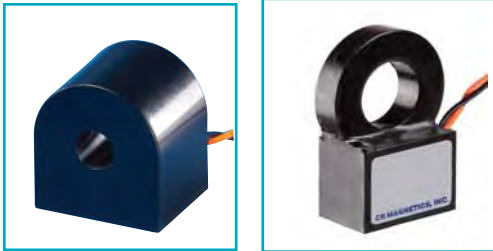


# Current Switch Normally Open

CR9300 Series



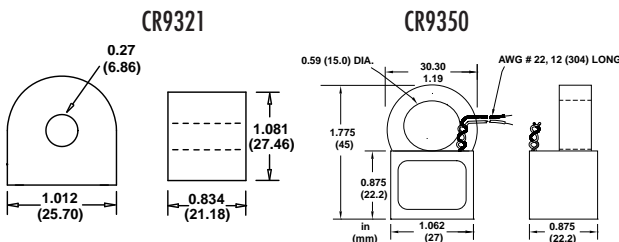
## DC SWITCHING (-NPN or -PNP)

V<sub>ce</sub> (full off): 30 VDC max.  
 I<sub>sink</sub> (full on): 120 mADC max. @ rated full-on  
 V<sub>ce</sub> (reverse polarity voltage): 1.2 VDC @ 100 mADC  
 V<sub>ce</sub> (full on): 1.5 VDC @ 120 mADC I<sub>sink</sub>  
 Off state leakage current: 5 $\mu$ a @ 30 VDC (typical)

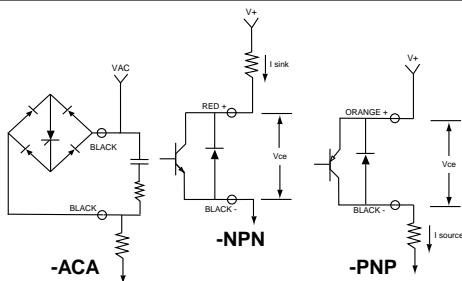
## AC SWITCHING (-ACA)

Off state voltage: 240 VAC RMS max.  
 Minimum holding current: 10 mA  
 On state current: 0.8 AAC RMS max. continuous  
 Off state leakage: 50  $\mu$ a @ 240 VAC max.  
 Peak Non-Repetitive Surge Current:  
 8 AAC RMS (1 cycle, 60 Hz.)

## OUTLINE DRAWING



## ELECTRICAL CONNECTIONS



The **CR9300** 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.

## Applications

Continuity  
 Proving Switch

## 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<sub>ce</sub>  
 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  
 Weight 0.08 LBS.

\*All specifications for operation at 60 Hz only

## Regulatory Agencies



PART NUMBER																
CR				-			-		CURRENT SWITCH							
<b>9321</b>	.27 dia. Window	<table border="1"> <tr> <td><b>NPN</b></td> <td>Transistor Output</td> <td rowspan="3"><b>M</b> Mounting Case (Optional)</td> </tr> <tr> <td><b>PNP</b></td> <td>Transistor Output</td> </tr> <tr> <td><b>ACA</b></td> <td>AC Output</td> </tr> </table>								<b>NPN</b>	Transistor Output	<b>M</b> Mounting Case (Optional)	<b>PNP</b>	Transistor Output	<b>ACA</b>	AC Output
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<b>PNP</b>	Transistor Output															
<b>ACA</b>	AC Output															
<b>9350</b>	.61 dia. Window															