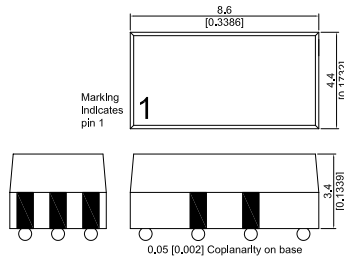


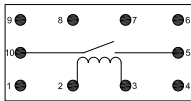


**DIMENSIONS (with BGA) 1A Version**

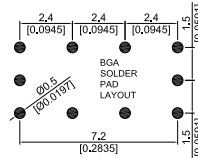
\*All dimensions in mm (inch)



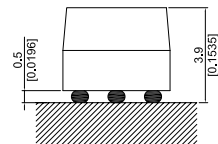
**PIN OUT**  
(Top View)



**PAD / PCB LAYOUT**  
(Bottom View)



**POST REFLOW**



Höhe: max.

**ORDER INFORMATION**

Series	Nominal Voltage	Switch Form	Option
<b>CRR</b>	<b>05-</b>	<b>1A</b>	<b>X</b>
<b>Options</b>			<b>S*</b>

\* Solder Ball Option (non-BGA part number is CRF05-1A)

**Part Number Example**

CRR05 - 1AS

**05** is the nominal voltage  
**1A** is the contact form  
**S** is the solder ball option

**COIL DATA**

Contact Form	Switch Model	Coil Voltage		Coil Resistance			Pull-In Voltage	Drop-Out Voltage	Nominal Coil Power
		VDC	Ω	VDC	VDC	mW			
<b>All Data at 20 °C *</b>		Nom.	Max.	Min.	Typ.	Max.	Max.	Min.	Typ.
		<b>1A</b>	<b>80</b>	5	7.5	135	150	165	3.5
<b>1A</b>	<b>80</b>	3	5	63	70	77	2.25	0.45	129
<b>1B</b>	<b>80</b>	5	7.5	117	130	143	3.75	0.75	192
<b>1B</b>	<b>80</b>	3	5	63	70	77	2.25	0.45	129

\* The pull-in / drop-out voltages and coil resistance will change at the rate of 0.4% per °C.

**SPST Reed Relays**

**RELAY DATA**

<b>All Data at 20° C</b>	<b>Switch Model → Contact Form →</b>	<b>Contact 80 Form A</b>			<b>Contact 80 Form B</b>			
<b>Contact Ratings</b>	<b>Conditions</b>	<b>Min.</b>	<b>Typ.</b>	<b>Max.</b>	<b>Min.</b>	<b>Typ.</b>	<b>Max.</b>	<b>Units</b>
Contact Ratings	Any DC combination of V & A not to exceed their individual max.'s.			10			10	W
Switching Voltage	DC or peak AC			170			170	V
Switching Current	DC or peak AC			0.5			0.5	A
Carry Current	DC or peak AC			1			1	A
Static Contact Resistance	w/ 0.5 V & 50 mA			200			200	mΩ
Insulation Resistance (100 Volts applied)	Across Contact Contact to coil and shield	10 <sup>10</sup> 10 <sup>13</sup>	10 <sup>12</sup> 10 <sup>14</sup>		10 <sup>10</sup> 10 <sup>13</sup>	10 <sup>12</sup> 10 <sup>14</sup>		Ω
Breakdown Voltage	Across Contact Coil to contact	210 1500			210 1500			VDC
Operate Time incl. Bounce	Measured w/ nominal voltage			0.6			0.6	ms
Release Time	No coil suppression			0.025			0.05	ms
Capacitance (@ 10 kHz)	Across Contact Contact to coil and shield		0.4 0.7				0.4 0.7	pF
<b>Life Expectancies</b>								
Switching 5 V - 10mA	DC <10 pF stray cap.		1000					10 <sup>6</sup> Cycles
For other load requirements, see the Life Test section								
<b>Environmental Data</b>								
Shock Resistance	1/2 sine wave duration for 11 ms			50			50	g
Vibration Resistance	From 10 - 2000 Hz			20			20	g
Ambient Temperature	10 °C/ minute max. allowable	-40		125	-40		125	°C
Storage Temperature	10 °C/ minute max. allowable	-55		125	-55		125	°C
Soldering Temperature	5 sec. dwell			260			260	°C
Material of Case	Themoset / Ceramic							
Material of pads	Au plated							