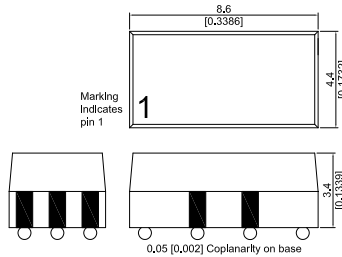


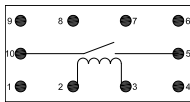


### DIMENSIONS (with BGA)

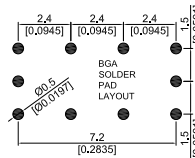
\*All dimensions in mm (inches)



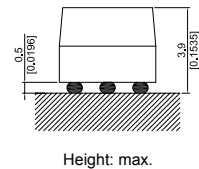
### PIN OUT (Top View)



### PAD / PCB LAYOUT (Bottom View)



### POST REFLOW



### ORDER INFORMATION

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

\* 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	Nennleistung
<b>All Data at 20 °C *</b>		VDC		Ω			VDC	VDC	mW
		Nom.	Max.	Min.	Typ.	Max.	Max.	Min.	Typ.
<b>1A</b>	<b>80</b>	5	7.5	135	150	165	3.5	0.75	167

\* The pull-in / drop-out voltages and coil resistance will change at the rate of 0,4% per °C.

**SPST Reed Relays**

**RELAY DATA**

All Data at 20° C	Switch Model --> Contact Form -->	Contact 80 Form A			Units
		Min.	Typ.	Max.	
Contact Ratings	Conditions				
Contact Ratings	Any DC combination of V & A not to exceed their individual max.'s.			10	W
Switching Voltage	DC or peak AC			170	V
Switching Current	DC or peak AC			0.5	A
Carry Current	DC or peak AC			0.5	A
Bulk Resistance	Through all plated material on substrate		200	350	mΩ
Static Contact Resistance	w/ 0.5 V & 50 mA		75	100	mΩ
dynamic Contact Resistance	Measured w/ 0.5 V & 50mA		100	150	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>		Ω
Breakdown Voltage	Across Contact Coil to contact	210 1500			VDC
Operate Time incl. Bounce	Measured w/ nominal voltage			0.1	ms
Release Time	No coil suppression			0.02	ms
Capacitance (@ 10 kHz)	Across Contact Contact to coil and shield		0.1 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 on P. 151.					
<b>Environmental Data</b>					
Shock Resistance	1/2 sine wave duration for 11 ms			50	g
Vibration Resistance	From 10 - 2000 Hz			10	g
Ambient Temperature	10 °C/ minute max. allowable	-40		125	°C
Storage Temperature	10 °C/ minute max. allowable	-55		125	°C
Soldering Temperature	5 sec. dwell			260	°C
Material of Case	Themoset / Ceramic				
Material of pads	Ag plated				