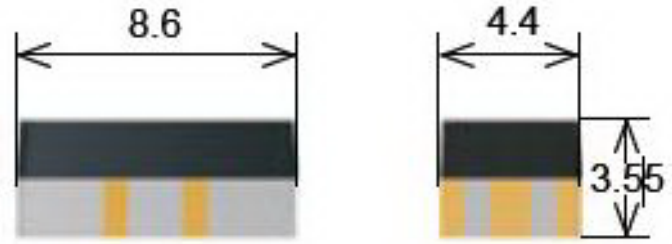


# CRF Series Reed Relays



- Features: High Frequency Ultraminiature Relay up to 7GHz, High Insulation Resistance up to 10 TOhm
- SMD, Ceramic/Thermoset Molded Package, Supplied in Tape&Reel, UL listed, BGA option
- For RF Parameters, see our website [www.meder.com](http://www.meder.com) or ask your responsible Customer Service
- Applications: High Frequency Applications, Test and Measurement Systems, Telecommunications

Part Description: **CRF 00-XXX (250)**

Nominal Voltage	Contact Form	Options	Packaging
03, 05	1A, 1B	S (Soldering Ball Option)	1000 standard or 250 pcs

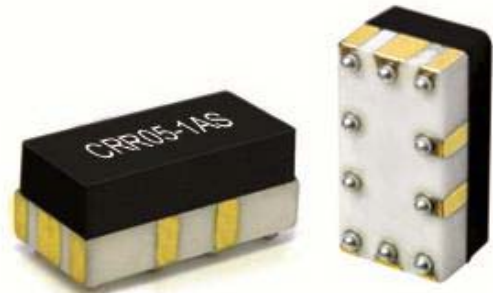
Customer Options	Switch Model	Unit
<b>Contact Data</b>	<b>80</b>	
<b>Rated Power (max.)</b> Any DC combination of V&A not to exceed their individual max.'s	10	W
<b>Switching Voltage (max.)</b> DC or peak AC	170	V
<b>Switching Current (max.)</b> DC or peak AC	0.5	A
<b>Carry Current (max.)</b> DC or peak AC	1.0	A
<b>Contact Resistance (max.)</b> @ 0.5V & 50mA	200	mOhm
<b>Breakdown Voltage (min.)</b> According to EN60255-5	0.21	kVDC
<b>Operating Time (max.)</b> Incl. Bounce; Measured with w/ Nominal Voltage	0.6	ms
<b>Release Time (max.)</b> Measured with no Coil Excitation	0.05	ms
<b>Insulation Resistance (typ.)</b> Rh<45%, 100V Test Voltage	10 <sup>10</sup>	Ohm
<b>Capacitance (typ.)</b> @ 10kHz across open Switch	0.4	pF

Coil Data				
Contact Form		1A		Unit
Switch Model		80		
Coil Voltage (typ.)	03	05	VDC	
Coil Resistance (typ.)	70	150	Ω	
Pull-In Voltage (max.)	2.25	3.5	VDC	
Drop-Out Voltage (min.)	0.45	0.75	VDC	
Nominal Coil Power (typ.)	129	167	mW	

All Data at 20°C

Relay Data		Unit
Dielectric Strength Coil/Contact (min.) according to EN60255-5	1,5	kVDC
Insulation Resistance Coil/Contact (min.) Rh<45%, 200V Test Voltage	10 <sup>13</sup>	Ohm
Shock Resistance (max.) 1/2 sine wave duration 11ms	50	g
Vibration Resistance (max.)	20	g
Operating Temperature	-40 to 125	°C
Storage Temperature	-55 to 125	°C
Soldering Temperature (max.) 5 sec. max.	260	°C
Washability	fully sealed	

### CRR Reed Relay

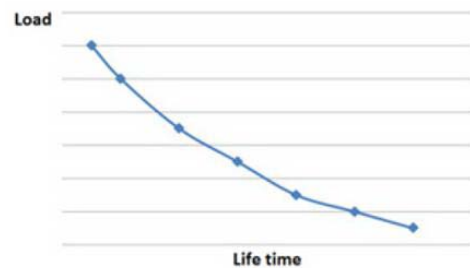


### Handing & Assembly Instructions

- Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used.
- External magnetic fields need to be taken into consideration, including a too high packing density. This may influence the relays' electrical characteristics.
- Mechanical shock impacts e.g. dropping the relays may cause immediate or post-installation failure.
- Wave soldering: maximum 260°/5 seconds.
- Reflow soldering: Recommendations given by the soldering paste manufacturer need to be considered as well as the temperature limits of other components/processes.

### Life Test Data

\*Load increase reduces life expectancy of Reed Switches



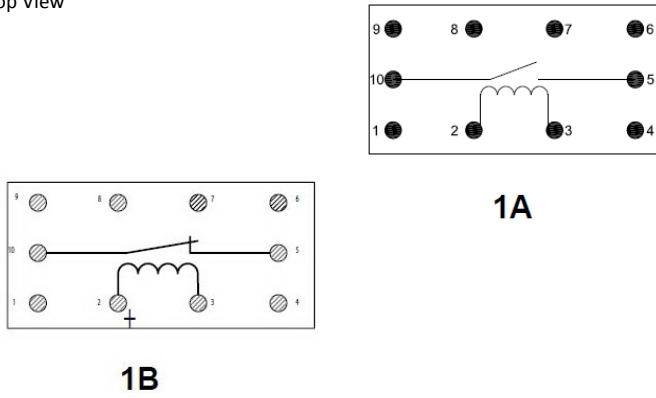
### Glossary

Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw	
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw	
Form C	Changeover SPDT = Single Pole Double Throw	



Pin Out

Top View



Pad / PCB Layout

Bottom View

