

D-Series 15kV, 50W

Capable of withstanding voltages up to 15kV, the D-series High Voltage Reed Relay is suitable for high reliability applications such as cardiac defibrillators, test equipment and high voltage power supplies. Two contact materials are available for low contact resistance or power switching applications. Standard coil voltages of 5, 12 and 24 volts are available with form A and B contact configurations.

The D-series range is now available with a new panel mounting option via nylon studs as well as a choice of electrical connection methods (solder turret tag, flying lead and 1/4" push on terminals) complementing the standard PCB 'through-hole' device.



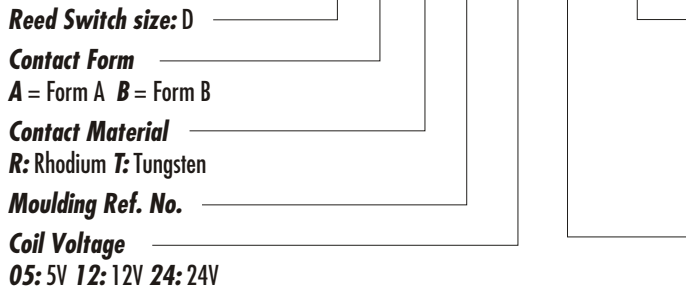
Contact	Units	Conditions	10kV Form A			10kV Form B			15kV Form A		
			Rhodium	Tungsten		Rhodium	Tungsten		Tungsten		
Contact material			Rhodium	Tungsten		Rhodium	Tungsten		Tungsten		
Isolation across contacts	kV	DC or AC peak	10	10		10	10		15		
Max. switching power	W		50	50		50	50		50		
Max. switching voltage	V	DC or AC peak	1000	7000		1000	7000		10000		
Max. switching current	A	DC or AC peak	3	2		3	2		2		
Capacitance across contacts	pF	coil/screen grounded	<0.2	<0.2		<0.2	<0.2		<0.2		
Lifetime operations		dry switching	10 ⁹	10 ⁹		10 ⁹	10 ⁹		10 ⁹		
Lifetime operations		50W switching	10 ⁶	10 ⁶		10 ⁶	10 ⁶		10 ⁸		
Contact resistance	mOhms	maximum (typical)	50 (15)	250 (100)		50 (15)	250 (100)		250 (100)		
Insulation Resistance	Ohms	minimum (typical)	10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)		10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)		10 ¹⁰ (10 ¹³)		
Coil			5V	12V	24V	5V	12V	24V	5V	12V	24V
Must Operate	V	DC	3.7	9	20	3.7	9	20	3.7	9	20
Must Release	V	DC	0.5	1.25	4	0.5	1.25	4	0.5	1.25	4
Operate Time	ms	diode fitted	3.0	3.0	3.0	2.0	2.0	2.0	3.0	3.0	3.0
Release Time	ms	diode fitted	2.0	2.0	2.0	3.0	3.0	3.0	2.0	2.0	2.0
Resistance	Ohms		28	150	780	38	240	925	16	95	350
Relay											
Isolation contact to coil	kV	DC or AC peak	17			17			17		
Insulation resistance contact to all other terminals	Ohms	minimum (typical)	10 ¹⁰ (10 ¹³)			10 ¹⁰ (10 ¹³)			10 ¹⁰ (10 ¹³)		
Environmental											
Operating temperature range	°C	-	20 to +70			-20 to +70			-20 to +70		

- **15kV Isolation**
- **Low Contact Resistance**
- **High Power Switching**
- **PCB or Panel Mount**
- **Flying Lead, Solder Turret and 1/4" Spade options**
- **Excellent AC Characteristics**

Crydom Magnetics Ltd
 7 Cobham Road
 Ferndown Industrial Estate
 Wimborne
 Dorset BH21 7PE
 Tel: +44 (0)1202 897969
 Fax: +44 (0)1202 891918
 magnetics@crydom.com
 www.crydom.co.uk

PART NUMBERING SYSTEM

D A T 7 24 15 F



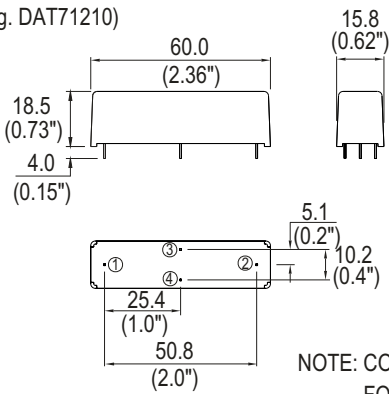
Mounting Style:
 No suffix: Standard PCB mount
F: Flying lead contact terminals
T: Turret contact terminals
P: Panel mount via nylon studs, turret contact/coil terminals
S: Panel mount via nylon studs, 1/4" spade contact terminals

Isolation Between Contacts
10: 10kV **15:** 15kV (DAT only)

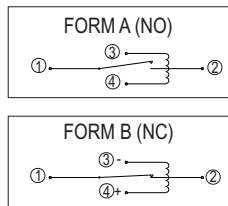
MECHANICAL

STANDARD

(e.g. DAT71210)



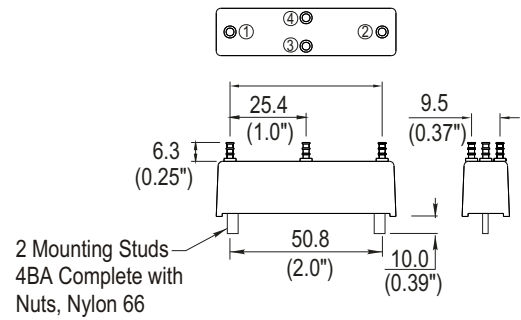
CIRCUIT DIAGRAMS (ALL VARIANTS)



NOTE: COIL POLARITY IS IMPORTANT FOR FORM B VARIANT ONLY.

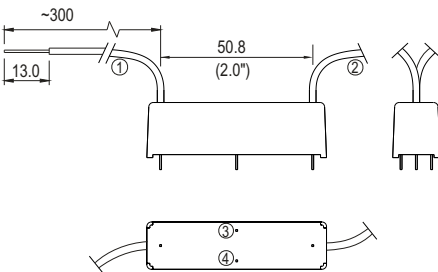
PANEL MOUNT

(e.g. DAT71210P)



FLYING LEAD

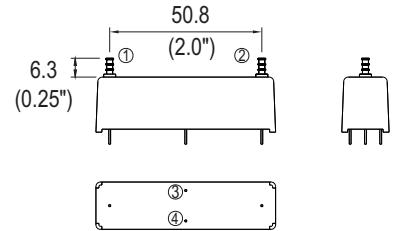
(e.g. DAT71210F)



NOTE: PINS WHICH ARE NOT NUMBERED HAVE NO ELECTRICAL CONNECTION.

TURRET

(e.g. DAT71210T)



NOTE: PINS WHICH ARE NOT NUMBERED HAVE NO ELECTRICAL CONNECTION.

SPADE TYPE

(e.g. DAT71210S)

'S' Suffix denotes the 0.250" 'Push On' blade connectors, 4BA fixing bolts and Epoxy potting.

