

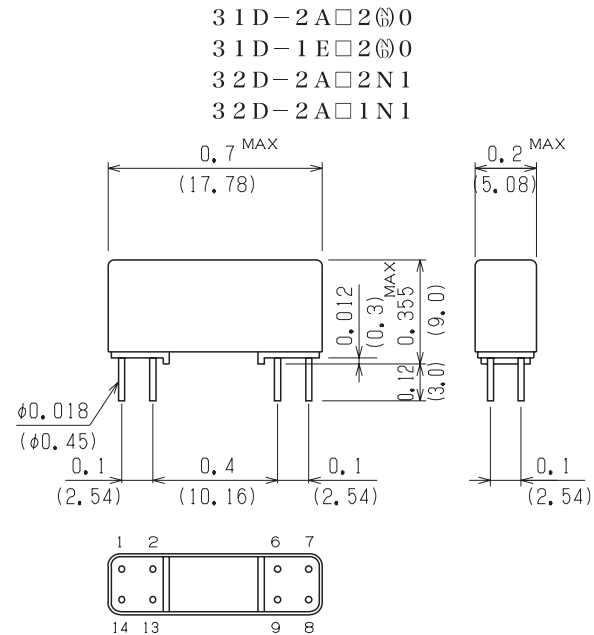
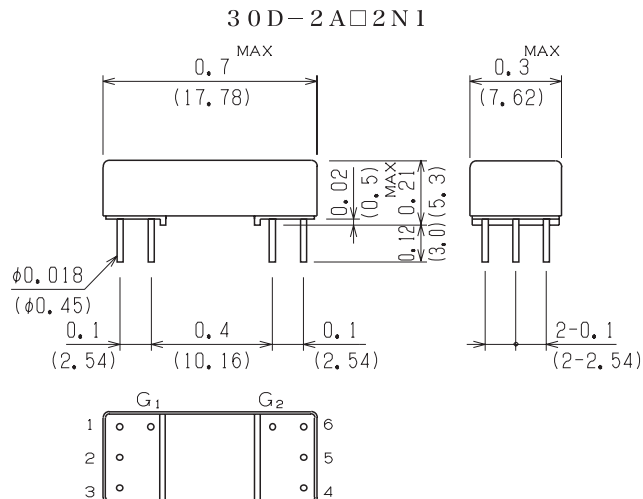
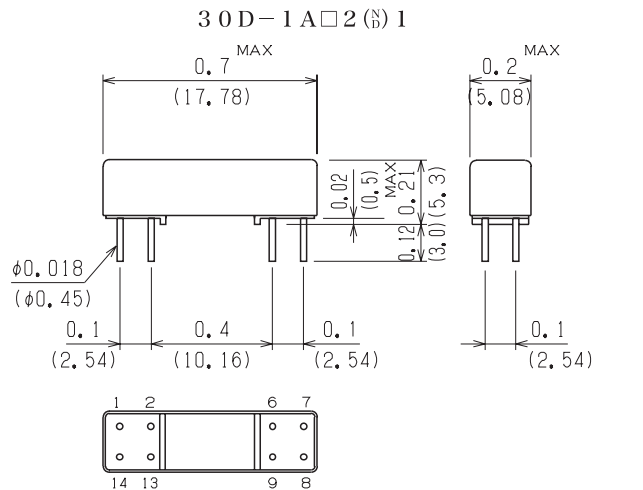
Microminiature Reed Relays (2)



These are the ultimates in miniature reed relays for high-frequency properties and are one pitch step (2.54mm) smaller than the 20D series. The 30 series are available Electrostatic Shield and Coaxial Shield.

Mechanical Dimensions

All dimensions are measured
in inches (millimeters).



Model 32D-2A□2N1

Contact	Coil
pin7 and pin1 ON	pin8 and pin13 impress current
pin7 and pin14 ON	pin9 and pin13 impress current

Model 32D-2A□1N1

Contact	Coil
pin1 and pin7 ON	pin2 and pin13 impress current
pin8 and pin14 ON	pin9 and pin13 impress current



3□D Series			50Ω Coaxial Model Number			50Ω Coaxial Model Number			50Ω Coaxial Model Number			50Ω Coaxial Model Number			Model Number					
			30D-1A□2□1			30D-2A□2N1			31D-2A□2□0			31D-1E□2□0			32D-2A□2N1		32D-2A□1N1			
Parameters		Test Condition	Units	1 Form A			2 Form A			2 Form A			1 Form C			2 Form A		2 Form A		
Coil Specs																				
Nominal coil voltage			VDC	5	12	24	5	12	24	5	12	24	5	12	24	5			12	
Coil resistance		±10% at20°C	Ω	160	600	1200	150	600	1800	150	600	1800	70	400	1500	160			600	
Operating voltage		15°C~35°C	VDC Max	3.6	9.6	19.2	3.6	9.6	19.2	3.6	9.6	19.2	3.6	9.6	19.2	3.6			9.6	
Operating voltage range		15°C~35°C	VDC	—	—	—	—	—	—	—	—	—	3.6/5.5 9.6/13.2 19.2/26.4			—			—	
Release voltage		15°C~35°C	VDC Min	0.7	1.2	2.4	0.7	1.2	2.4	0.7	1.2	2.4	0.7	1.2	2.0	0.7			1.2	
Contact Ratings																				
Switching voltage		Max. DC/Peak AC resistance	Volts													100				
Switching current		Max. DC/Peak AC resistance	Amps													0.5				
Carry current		Max. DC/Peak AC resistance	Amps													1.0				
Contact rating		Max. DC/Peak AC resistance	Watts													10				
Life expectancy		1V. 10mA	×10°Cyc													1000				
Contact resistance		Maximum initial	mΩ													150				
Contact resistance stability		Maximum initial	mΩ													5.0				
Relay Specifications																				
Insulation resistance		Between all isolated pins at 100V 20°C 40%RH	Ω	10 ¹¹			10 ¹¹			10 ¹⁰			10 ¹⁰			10 ¹¹			10 ¹¹	
Capacitance			pF-Max																	
Across open contacts		Shield guarding		0.2			0.2			0.2			0.6			0.2			0.2	
Contact to Shield		Contacts open, :Make-shield :Break-shield		1.4			1.2			1.2			1.7 3.6			1.5 2.7 (7-6)			1.5	
Open contact to coil		Shield floating Shield guarding : Make-Coil : Break-Coil		0.5			0.5			0.5			1.0 2.2			0.6 1.1 (7-13)			0.6	
Dielectric strength		Between contacts	VDC	200			200			200			200			200			200	
		Contacts to shield		200			200			200			200			500			500	
Operating time (Including. bounce)		At nominal coil voltage, 100Hz Square wave	msec	0.35			0.35			0.35			1.0			0.35			0.35	
Release time		Diode suppression	msec	0.25			0.25			0.25			1.0			0.25			0.25	
Environmental Ratings			Schematics Top view																	
Mesurement reference conditons Temp. : 15°C~35°C Humidity : 25%~85%RH Atmospheric pressure : 860~1060hPa Storage temp. : -40°C~+80°C Operating temp : -20°C~+60°C The operating and Release Voltage and the coil resistance are specified at 20°C. These values change approximately 0.4%/°C change in the ambient temperature. Vibration : 20Gs to 2000Hz Shock : 50Gs																				

Notes :

- (1) Values are specified with a resistive load being applied. A contact protective circuit is required for C and L Type loads.
- (2) The values of the operating time and release time however, are when the rated coil voltage is applied and a clamp diode is attached.
- (3) Model 30D-1A□□2D1 : Diode is connected to pin 14 (+) and pin 8 (-).
Model 31D : Diode is connected to pin 2 (+) and pin 6 (-).
Correct coil pority must be followed.

ORDERING CODE

3 0 D — □ A □ 2 □ 1
(1) (3) (5)
3 1 D — □ □ □ 2 □ 0
(1) (2) (3) (5)
3 2 D — 2 A □ □ N 1
(3) (4)

Example 30D-1A12N1 Represents Series 30D with 1Form A, Dry Reed (Rhodium), Coil Voltage 5V and Coaxial Shield.

- | | | |
|---|--|---|
| (1) Number of capsule
1-1capsule
2-2capsules | (3) Coil Voltage
1-5VDC
2-12VDC
3-24VDC (32D N/A) | (5) Diode Options
N-No Diode
D-With Diode |
| (2) Contact Form
A-Form A
E-Multi-pole
(Break-before-Make action Form C) | (4) Shield
1-Electrostatic Shield
2-Coaxial Shield | |