

# 53D Series

PCB Mount / EMF

## PRODUCT DESCRIPTIONS



The 53D series is a 4 Form A configuration of EMF relay, which achieves 5 $\mu$ V low thermal EMF. Due to measure and switch microvolt level signals, this relay is ideal to reduce error caused by EMF, which is designed to offset any additional voltage. Electrostatic shield improves signal noise ratio.

- Low Thermal EMF: <5 $\mu$ V
- Single Coil Drive 4 Form A
- Electrostatic Shield as Standard Feature

## SPECIFICATIONS



53D Series		53D-4A□1N0			
Parameters	Units	4 Form A			Test Conditions
<b>Coil Specifications</b>					
Nominal Coil Voltage	VDC	5.0	12.0	24.0	
Coil Resistance	$\Omega$	200	1100	3700	$\pm 10\%$ @ 20°C
Operate Voltage	VDC Max	3.75	8.8	17.6	@ 20°C
Release Voltage	VDC Min	0.7	1.2	2.4	@ 20°C
<b>Contact Ratings</b>					
Switching Voltage	Volts	100			Max DC/Peak AC resistance
Switching Current	Amps	0.5			Max DC/Peak AC resistance
Carry Current	Amps	1.0			Max DC/Peak AC resistance(@ 30°C)
Contact Rating	Watts	10			Max DC/Peak AC resistance
Life Expectancy	$\times 10^6$ Cycle	1000			@ 1V 10mA
Contact Resistance	m $\Omega$	150			Max initial @ operate voltage
Contact Resistance Stability	m $\Omega$	5.0			Max initial @ operate voltage
<b>Relay Specifications</b>					
Insulation Resistance	$\Omega$ Min	10 <sup>10</sup>			Between all isolated pins @ 100V 20°C 65%RH
Thermal EMF	$\mu$ V Max	5.0			Test after rated voltage applied for 15 minutes
Dielectric Strength (Static)	VDC Min	200			Between contacts
	VDC Min	200			Contacts to shield
	VDC Min	200			Contacts/Shield to coil
Operate Time (Including Bounce)	msec Max	1.0			@ nominal coil voltage
Release Time	msec Max	1.0			100 Hz square wave Diode suppression
<b>Measurement Reference Conditions</b>			<b>Environmental Ratings</b>		
Temp: 15°C to 35°C Humidity: 25% to 75%RH Atmospheric Pressure: 860 to 1060hpa			Storage temp: -40°C to +85°C Operate temp: -20°C to +80°C Vibration: 20G's to 2000Hz Shock: 50G's		

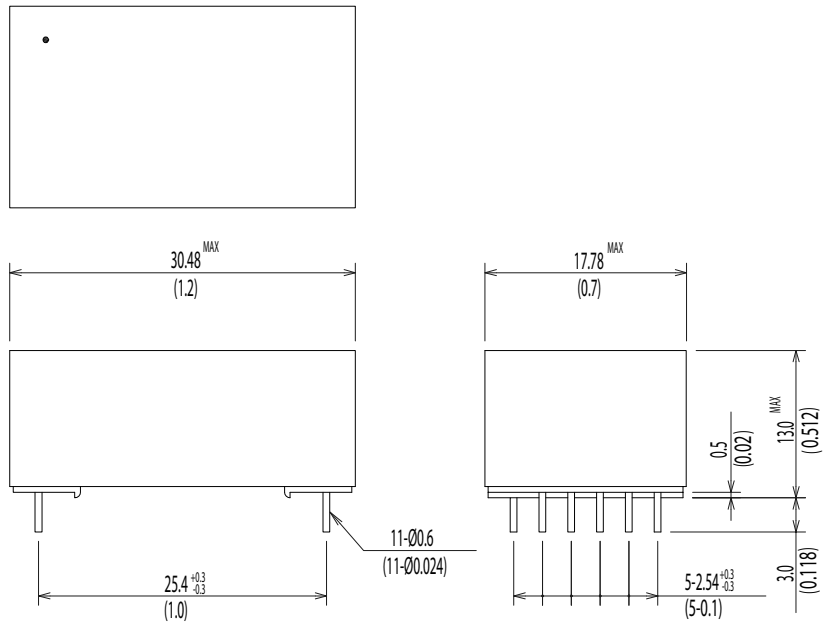
### Ordering Code:

**53D-4A□1N0**

□=1(5.0VDC), 2(12.0VDC), 3(24.0VDC)

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**Dimensions All Dimensions are mm (inch)**



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**Schematic <Top View>**

