

NEC**4 PIN SOP SOLID STATE RELAY****PS7200N-1A****FEATURES**

- **1 CHANNEL TYPE**
1a output
- **DESIGNED FOR AC/DC SWITCHING LINE CHANGER**
- **SMALL PACKAGE**
4 pin SOP
- **LOW OFFSET VOLTAGE**
- **AVAILABLE ON TAPE AND REEL**
PS7200N-1A-E3, E4, F3, F4

DESCRIPTION

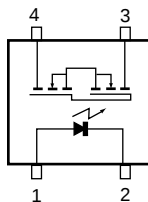
The PS7200N-1A is a 4 pin SOP solid state relay containing normally open (N.O.) contact on output side. It is suitable for analog signal control, due to its low offset and high linearity.

APPLICATIONS

- MEASUREMENT EQUIPMENT
- FA/OA EQUIPMENT

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

PART NUMBER				PS7200N-1A		
SYMBOLS		PARAMETERS	UNITS	MIN	TYP	MAX
Diode	V _F	Forward Voltage, I _F = 10 mA	V		1.2	1.4
	I _R	Reverse Current, V _R = 5 V	μA			5
MOS FET	I _{LOFF}	Off-State Leakage Current, V _D = 40 V	nA			1
	C _{OUT}	Off-State Capacitance (MOSFET), V _D = 0 V, f = 1 MHz	pF		6	8
Coupled	R _{ON}	On-State Resistance (MOSFET), I _F = 10 mA, I _L = 10 mA	Ω		1.8	
	CR	R _{ON} x C _{OUT}	pF• Ω		11	
	t _{ON}	Turn-on Time, I _F = 10 mA, V _O = 5 V, PW ≥ 10 ms	ms		0.01	1.0
	t _{OFF}	Turn-off Time, I _F = 10 mA, V _O = 5 V, PW ≥ 10 ms	ms		0.5	1.0
	R _{I-O}	Isolation Resistance, V _{I-O} = 1.0 kV	Ω	10 ⁹		
	C _{I-O}	Isolation Capacitance, V = 0 V, f = 1 MHz	pF		0.4	

PS7200N-1A

ABSOLUTE MAXIMUM RATINGS¹ ($T_A = 25^\circ\text{C}$)

SYMBOLS	PARAMETERS	UNITS	RATINGS
Diode			
I_F	Forward Current (DC)	mA	50
V_R	Reverse Voltage	V	5
P_D	Power Dissipation	mW	50
I_{FP}	Peak Forward Current ²	A	1
MOSFET			
V_L	Break Down Voltage	V	40
I_L	Continuous Load Current	mA	250
P_D	Power Dissipation	mW	100
Coupled			
BV	Isolation Voltage ³	V	1500
P_T	Total Power Dissipation	mW	150
T_{OPR}	Operating Temperature	$^\circ\text{C}$	-40 to +80
T_{STG}	Storage Temperature	$^\circ\text{C}$	-40 to +100

Notes:

1. Operation in excess of any one of these parameters may result in permanent damage.
2. $PW = 100\mu\text{s}$, Duty Cycle = 1%.
3. AC voltage for 1 minute at $T_A = 25^\circ\text{C}$, RH = 60% between input and output.

OUTLINE DIMENSIONS (Units in mm)