

FEATURES

- CONTAINS NORMALLY CLOSE OUTPUT (MOSFET)
- DESIGNED FOR AC/DC SWITCHING LINE CHANGER
- DUAL CHANNEL 8 PIN DIP PACKAGE

DESCRIPTION

PS7122-2B and PS7122L-2B are solid state relays containing a GaAs LED on the light emitting side (input side) and MOSFETs on the output side. They are suitable for analog signal control because of their low offset and high linearity.

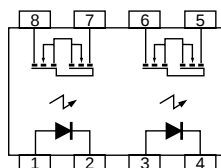
APPLICATIONS

- VOICE TELEPHONY
- X-CHANGER
- PBX

ELECTRICAL CHARACTERISTICS (T_A = 25°C)

PART NUMBER				PS7122-2B, PS7122L-2B		
SYMBOLS		PARAMETERS	UNITS	MIN	TYP	MAX
Diode	V _F	Forward Voltage, I _F = 10 mA	V		1.2	1.5
	I _R	Reverse Current, V _R = 5 V		μA		0 5
MOS FET	R _{ON}	On-stage Resistance, I _L = 10 mA	Ω		6	8
	I _{LOFF}	Off-stage Leak Current, I _F = 10 mA, V _L = 250 V	μA		0.03	1
Coupler	t _{ON}	Turn-on Time I _F = 10 mA V _L = 5 V	ms		0.03	0.2
	t _{OFF}	Turn-off Time R _L = 0.5 kΩ	ms		0.40	1.5
	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/ch		1.1	

PS7122-2B, PS7122L-2B



PS7122-2B, PS7122L-2B

ABSOLUTE MAXIMUM RATINGS¹ (T_A = 25°C)

SYMBOLS	PARAMETERS	UNITS	RATINGS	
			PS7122-2B	PS7122L-2B
Diode				
IF	Forward Current (DC)	mA	50	50
VR	Reverse Voltage	V	5	5
PD	Power Dissipation	mW/ch	50	50
IFP	Peak Forward Current (PW = 100 μs, Duty Cycle = 1%)	A	1	1
MOSFET				
VBOU	Break Down Voltage	V	250	250
IL	Continuous Load Current	mA	200	200
POU	Power Dissipation	mW/ch	375	375
Coupled				
BV	Isolation Voltage ²	V	1500	1500
PT	Total Power Dissipation	mW	850	850
TOP	Operating Temperature	°C	-40 to 80	-40 to 80
TSTG	Storage Temperature	°C	-40 to 100	-40 to 100

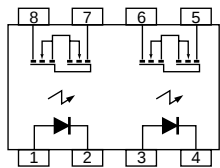
- Notes:
1. Operation in excess of any one of these parameters may result in permanent damage.
 2. AC voltage for 1 minute at T_A = 25 °C, RH = 60 % between input and output.

RECOMMENDED OPERATING CONDITIONS (T_A = 25°C)

PART NUMBER		PS7122-2B,PS7122L-2B				
SYMBOLS	PARAMETERS	UNITS	MIN	TYP	MAX	
I _F	LED Operating Current	mA	2	10	20	
V _F	LED Off Voltage	V	0		0.5	

PIN CONNECTION (Top View)

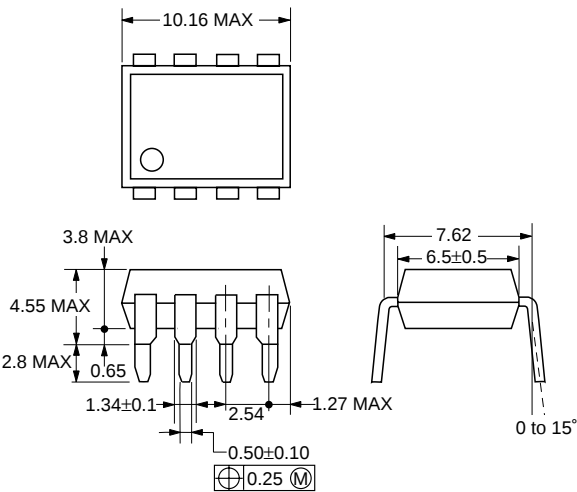
PS7122-2B, PS7122L-2B



1. LED Anode
2. LED Cathode
3. LED Anode
4. LED Cathode
5. MOSFET (N.C.)
6. MOSFET (N.C.)
7. MOSFET (N.C.)
8. MOSFET (N.C.)

OUTLINE DIMENSIONS (Units in mm)

PS7122-2B



PS7122L-2B

