

HIGH ISOLATION VOLTAGE 6 PIN DIP SOLID STATE RELAY

PS7360-1A
PS7360L-1A

FEATURES

- **HIGH ISOLATION VOLTAGE**
BV : 3750 Vr.m.s. MIN
- **1 CHANNEL TYPE**
1a output
- **DESIGNED FOR AC/DC SWITCHING LINE CHANGER**
- **SMALL PACKAGE**
6 pin DIP
- **LOW OFFSET VOLTAGE**
- **SURFACE MOUNT TYPE LEAD**
PS7360L-1A

DESCRIPTION

PS7360-1A and PS7360L-1A 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.

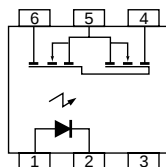
APPLICATIONS

- EXCHANGE EQUIPMENT
- MEASUREMENT EQUIPMENT
- FA/OA EQUIPMENT

ELECTRICAL CHARACTERISTICS (T_A = 25 °C)

PART NUMBER				PS7360-1A, PS7360L-1A		
SYMBOLS		PARAMETERS	UNITS	MIN	TYP	MAX
Diode	V _F	Forward Voltage, I _F = 10 mA	V		1.1	1.5
	I _R	Reverse Current, V _R = 5 V	μA			5.0
MOS FET	I _{LOFF}	Off-State Leakage Current, V _D = 600 V	μA		0.03	1.0
Coupled	R _{ON}	On-State Resistance, I _F = 5 mA, I _L = 1 mA	Ω			50
	t _{ON}	Turn-on Time I _F = 10 mA, V _L = 5 V, R _L = 500 Ω, PW ≥ 10 ms	ms			2.0
	t _{OFF}	Turn-off Time I _F = 10 mA, V _L = 5 V, R _L = 500 Ω, PW ≥ 10 ms	ms			0.2
	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		1.1	

PS7360-1A, PS7360L-1A



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ABSOLUTE MAXIMUM RATINGS¹ (T_A = 25°C)

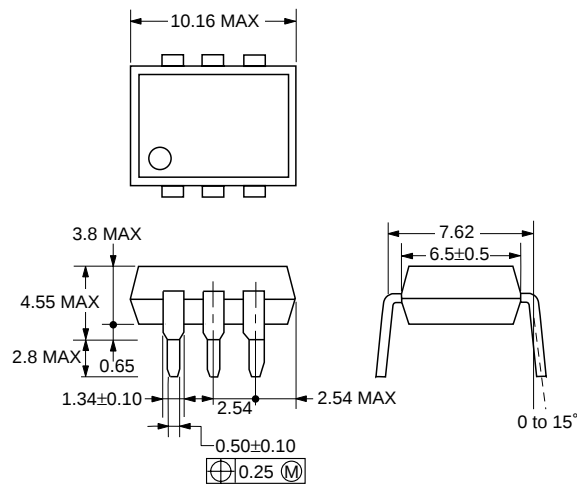
SYMBOLS	PARAMETERS	UNITS	RATINGS
Diode			
I _F	Forward Current (DC)	mA	50
V _R	Reverse Voltage	V	5.0
P _D	Power Dissipation	mW	50
I _{FP}	Peak Foward Current ²	A	1
MOSFET			
V _L	Break Down Voltage	V	600
I _L	Continuous Load Current	mA	90
P _D	Power Dissipation	mW	560
BV	Isolation Voltage ³	Vr.m.s.	3750
P _T	Total Power Dissipation	mW	610
T _A	Operating Ambient Temp.	°C	-40 to +85
T _{STG}	Storage Temperature	°C	-40 to +125

Notes:

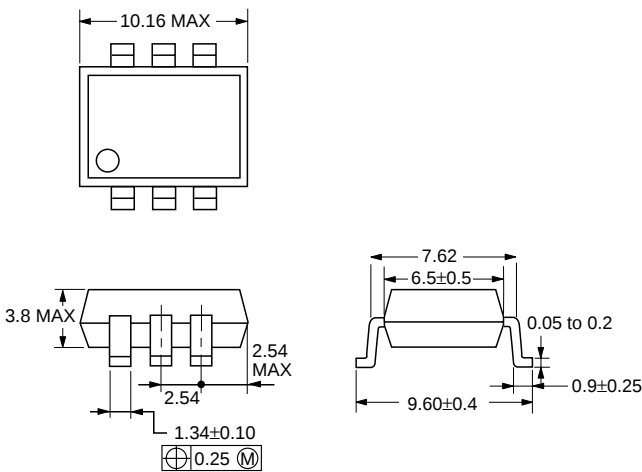
1. Operation in excess of any one of these parameters may result in permanent damage.
2. PW = 100 μs, Duty Cycle = 1 %
3. AC voltage for 1 minute at T_A = 25 °C, RH = 60 % between input and output.

OUTLINE DIMENSIONS (Units in mm)

PS7360-1A

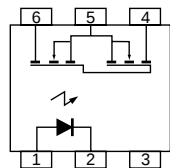


PS7360L-1A



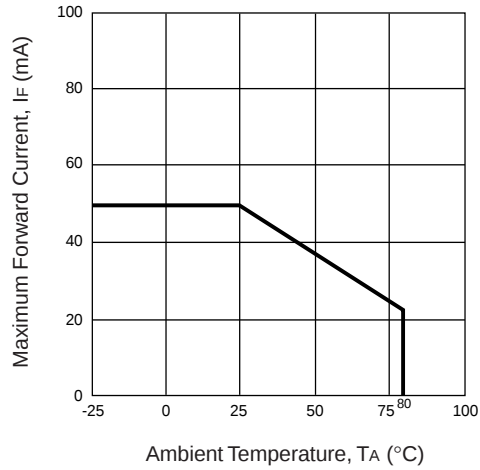
PIN CONNECTION (Top View)

PS7360-1A, PS7360L-1A

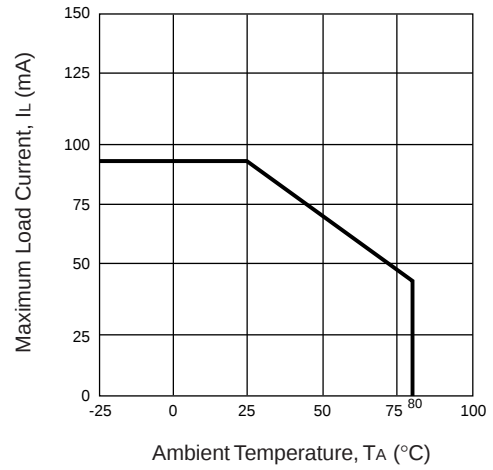


TYPICAL PERFORMANCE CURVES ($T_A = 25\text{ }^{\circ}\text{C}$)

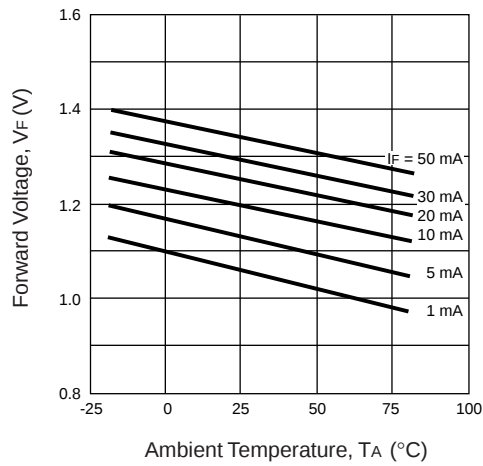
**MAXIMUM FORWARD CURRENT
vs. AMBIENT TEMPERATURE**



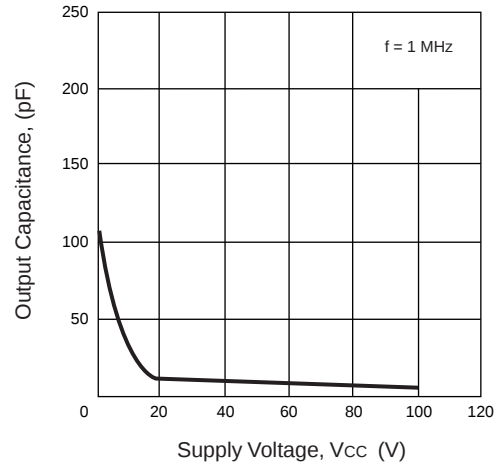
**MAXIMUM LOAD CURRENT
vs. AMBIENT TEMPERATURE**



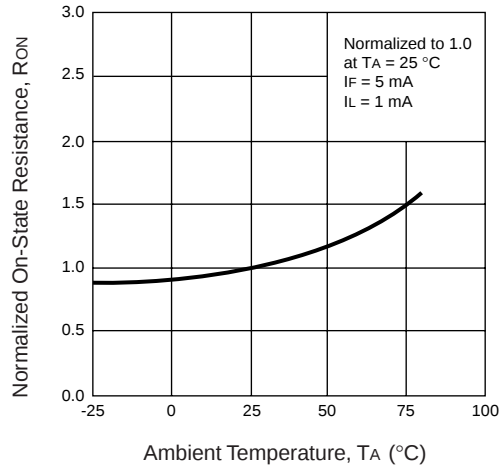
**FORWARD VOLTAGE vs.
AMBIENT TEMPERATURE**



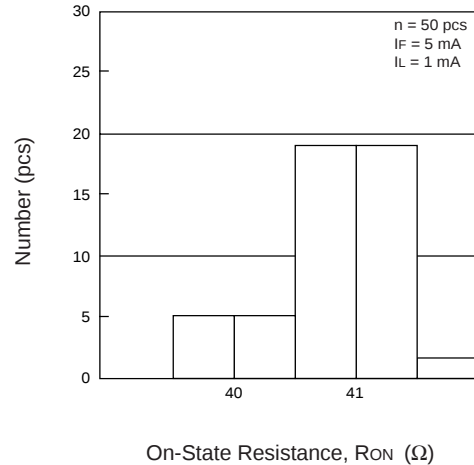
**OUTPUT CAPACITANCE
vs. SUPPLY VOLTAGE**



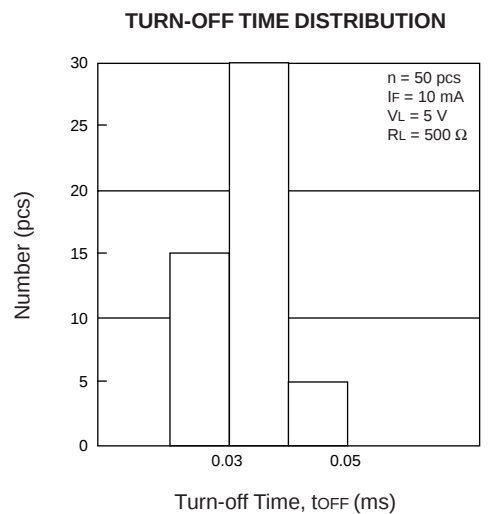
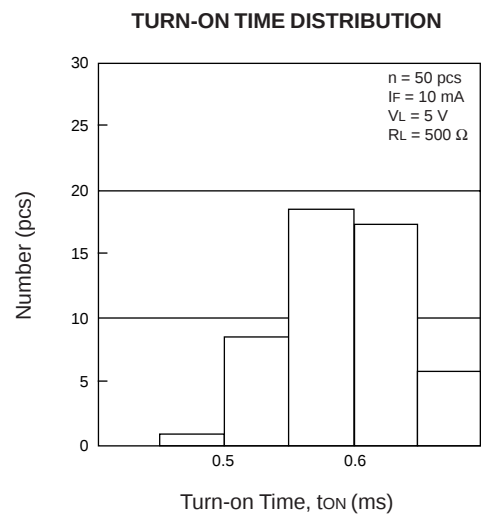
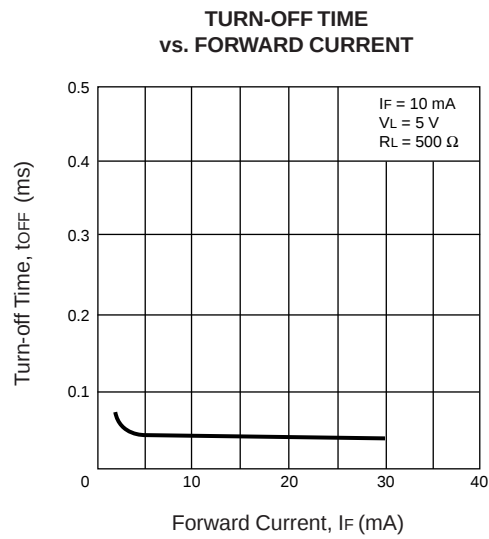
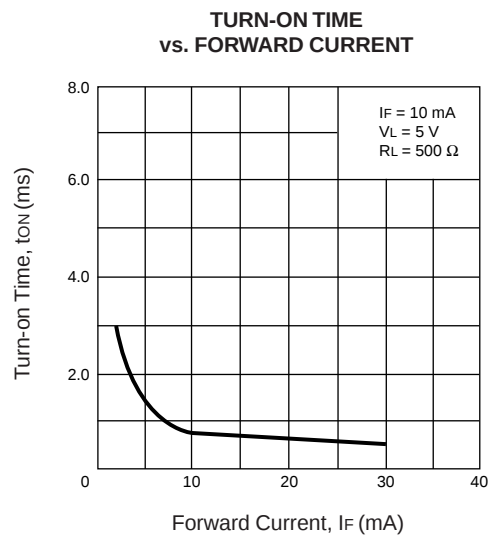
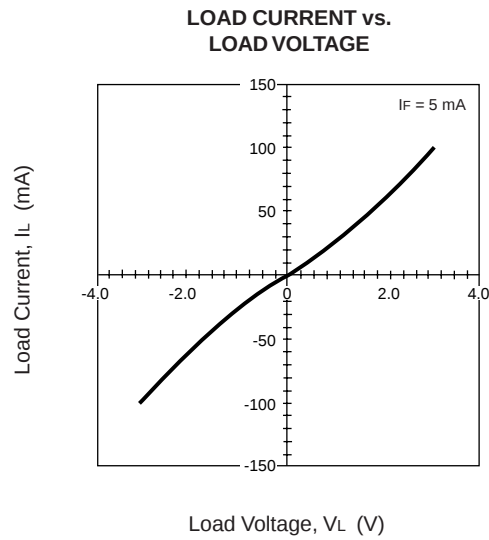
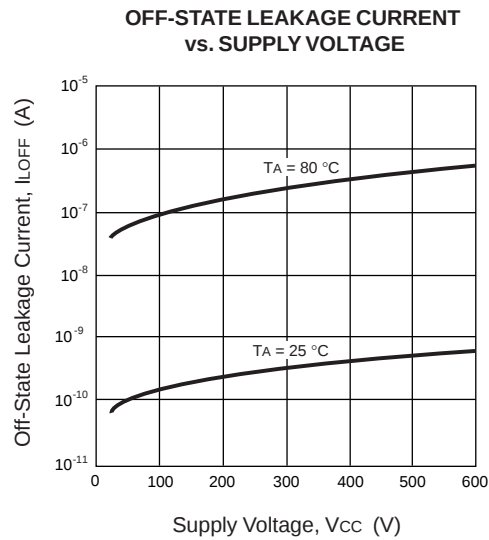
**NORMALIZED ON-STATE RESISTANCE
vs. AMBIENT TEMPERATURE**



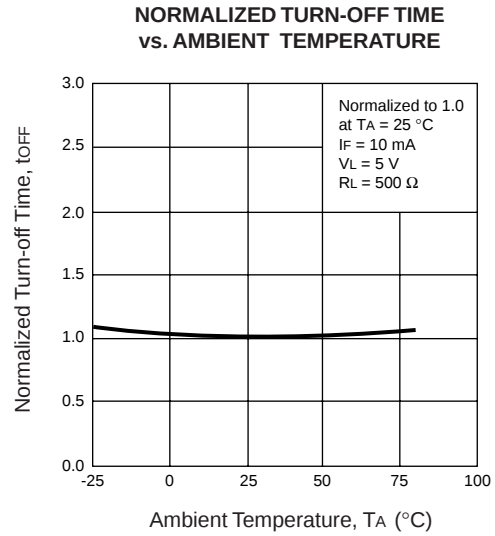
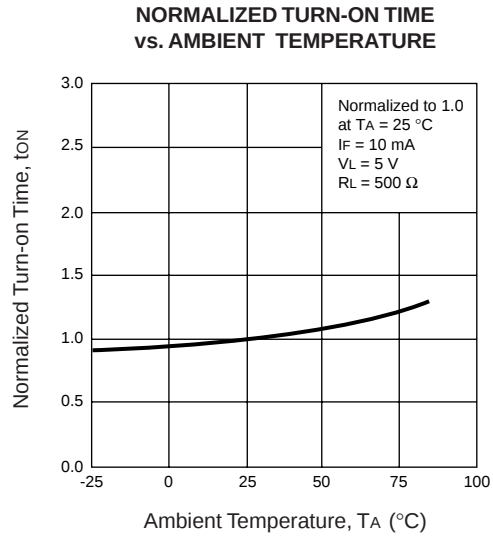
ON-STATE DISTRIBUTION



TYPICAL PERFORMANCE CURVES (TA = 25 °C)

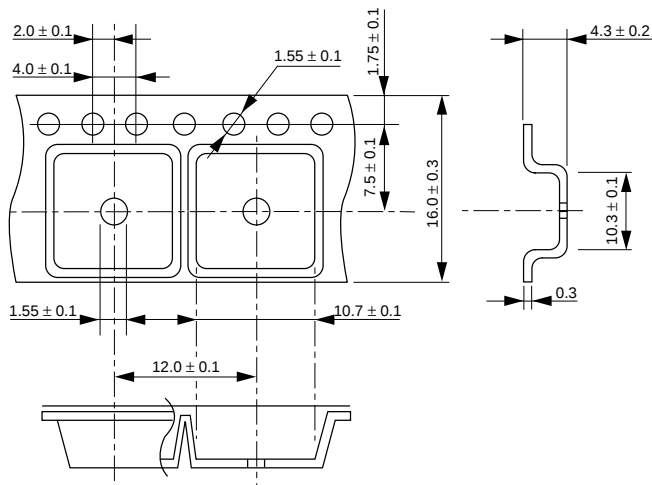


TYPICAL PERFORMANCE CURVES (T_A = 25 °C)

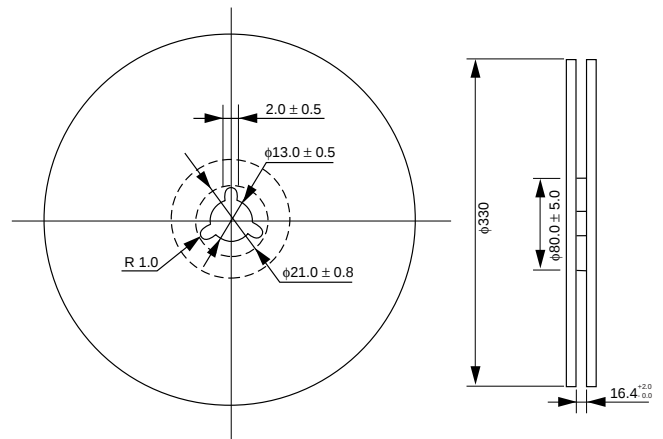


TAPING SPECIFICATIONS (Units in mm)

OUTLINE AND DIMENSIONS (TAPE)



OUTLINE AND DIMENSIONS (REEL)

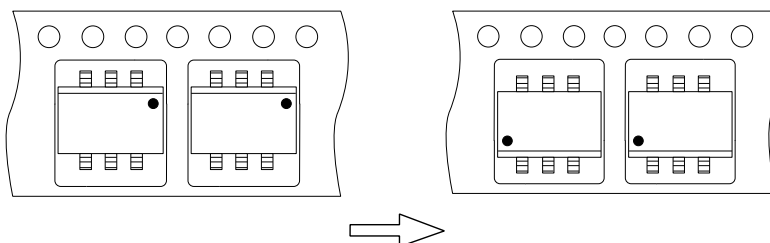


Notes:
1. Packaging : 1000 pcs/reel

TAPING DIRECTION

PS7360L-1A-E3

PS7360L-1A-E4



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