

GENERAL DESCRIPTION:

1. High capacity type power Photo MOS.

Can switch a wide range of currents and voltages. Can control various types of loads, from very small loads to a max. 4.5A AC/DC current for sequencers, motors, and lamps.

2. Low on-resistance and high sensitivity.

Low on-resistance of less than Typ. 0.035Ω.

High sensitivity LED operate current of Typ. 3 mA.

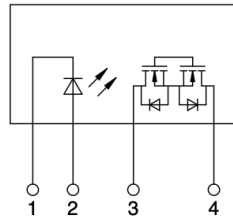
3. AC/DC dual use

Bi-directional control is possible. There is no need to differentiate depending on the load as was necessary with the conventional SSR.

PIN CONFIGURATION:



LT1 0000V
AC/DC Type
(1) Input: DC -
(2) Input: DC +
(3) Output: DC or AC
(4) Output: DC or AC



LT1 0000V(F)
AC/DC Type
(1) Input: DC +
(2) Input: DC -
(3) Output: DC or AC
(4) Output: DC or AC

FEATURES:

- Optically isolated
- Low On - state resistance
- Low input power consumption
- MOSFET output thyristor
- Ultra slim and light weight, Sil terminals type for high density mounting:
- --Size:5.4(W) x 20.3(L) x 12.6(H) mm;
- --Weight: approximately 3.0g

APPLICATIONS:

- Temperature control system
- Industrial automatic control
- Lighting system
- Office appliance
- Factory appliance
- Traffic signals
- Measuring instruments
- Industrial machines
- Mercury relay replacement

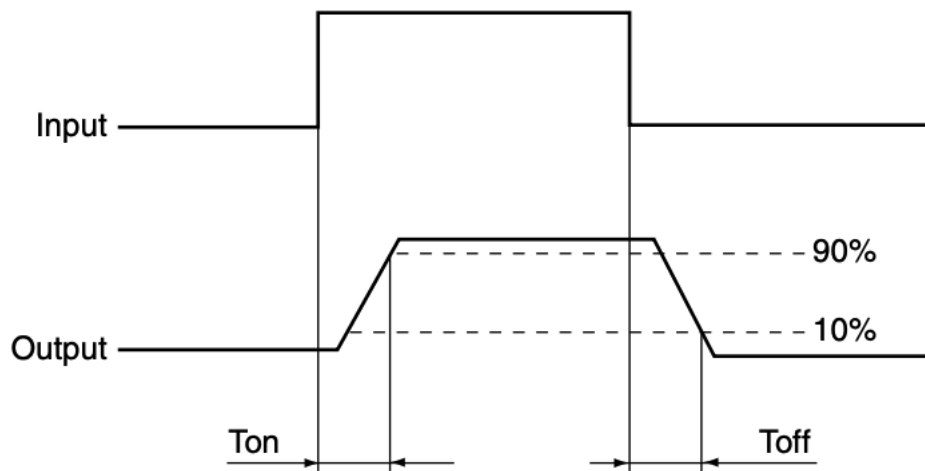
Absolute Maximum Ratings (Ambient temperature: 25°C)

	Item	Symbol	LT11004V(F)	Unit	Remarks
Input	LED Forward Current	I _F	50	mA	
	LED Reverse Voltage	V _R	5	V	
	Peak forward current	I _{FP}	1	A	f = 100Hz, Duty Ratio = 0.1%
	Power Dissipation	P _{in}	75	mW	
Output	Load voltage (Peak AC)	V _L	100	V	
	Continuous load current	I _L	4.5	A	Peak AC, DC
	Peak load current	I _{peak}	8.0	A	100 ms (1shot), V _L = DC
	Power dissipation	P _{out}	1.6	W	
Total power dissipation		P _T	1.6	W	
I/O isolation voltage		V _{iso}	2500	V _{rms}	
Ambient temperature	Operating	T _{opr}	-40 to +85	°C	(Non-icing at low temperatures)
	Storage	T _{stg}	-40 to +100	°C	

Electrical Characteristics (Ambient temperature: 25°C)

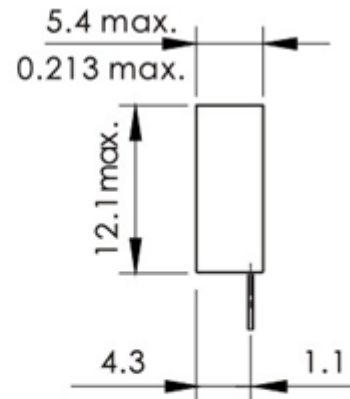
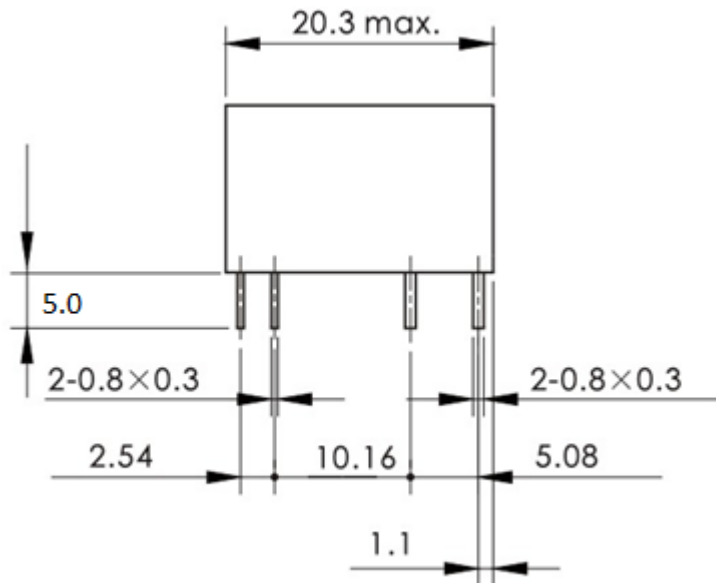
Item			Symbol	LT11004V(F)	Unit	Condition
Input	LED Operate Current	Typical	IFon	1.0	mA	IL = 100 mA
		Maximum		3.0	mA	VL = 10 V
	LED Turn off Current	Minimum	IFoff	0.4	mA	IL = 100 mA
		Typical		0.9	mA	VL = 10 V
	LED Dropout Voltage	Typical	VF	1.25	V	IF = 50 mA
		Maximum		1.5	V	
Output	On resistance	Typical	Ron	0.035	Ω	IF = 10 mA
		Maximum		0.06	Ω	IL = Max. Within 1 s
	Off state leakage current	Maximum	ILeak	10	μA	IF = 0 mA VL = Max.
Transfer characteristics	Turn on time*	Typical	Ton	0.8	ms	IF = 10 mA
		Maximum		3.0	ms	IL = 100 mA VL = 10 V
	Turn off time*	Typical	Toff	0.1	ms	IF = 10 mA
		Maximum		1.0	ms	IL = 100 mA VL = 10 V
	I/O capacitance	Typical	Ciso	0.8	pF	f = 1 MHz
		Maximum		1.5	pF	VB = 0 V
	Initial I/O isolation resistance	Minimum	Riso	1000	MΩ	500 V DC
	Max. operating frequency	Maximum	---	0.5	cps	IF = 10 mA Duty factor = 50% IL = Max., VL = Max.

***Turn on/Turn off time**

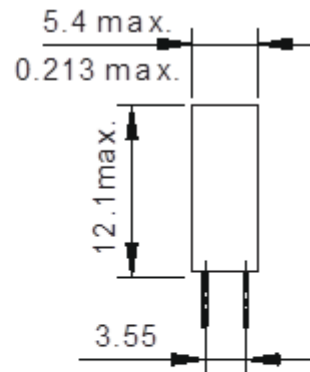
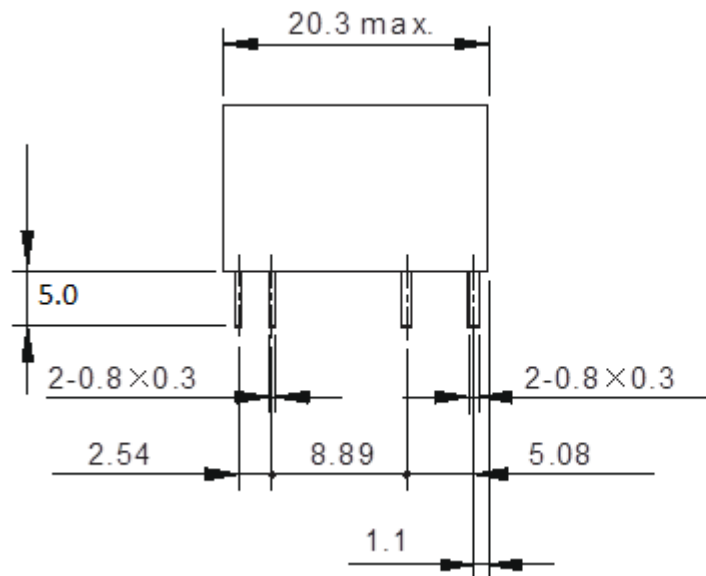


Dimensions (Unit:mm)

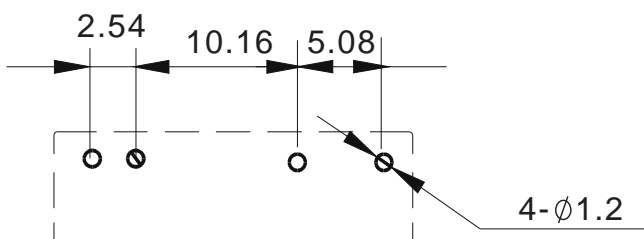
LT10000OV



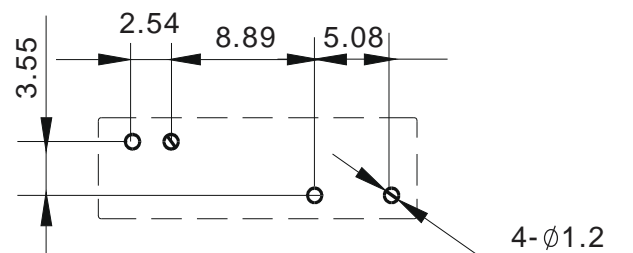
LT10000OV (F)



P.C.B Layout (Bottom View)(Unit:mm)



LT1 0000V

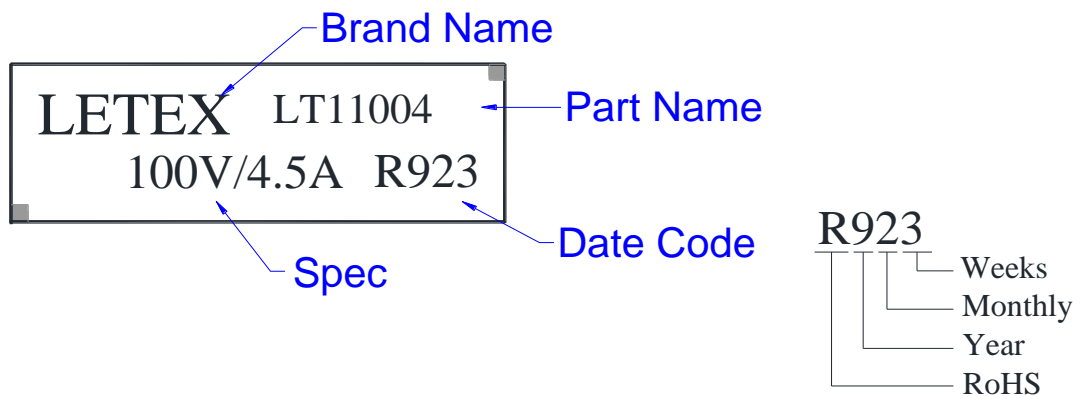


LT1 0000V (F)

Macking (Bottom View):

Marking

(Each photo MOS Relay shall be marked with the following information)



- Note:
1. Devices are pockets in accordance with EIA standard EIA-481-A and specifications given above.
 2. Packaging:1 Box 100 pcs