GENERAL DESCRIPTION:

1. High capacity type power PhotoMOS.

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.

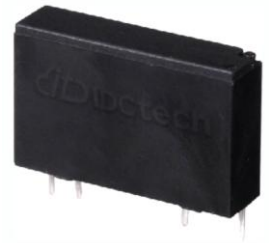
Low on-resistance of less than Typ. 0.035Ω.

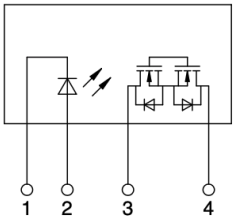
High sensitivity LED operate current of Typ. 3 mA.

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

LT1 OOOOV(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

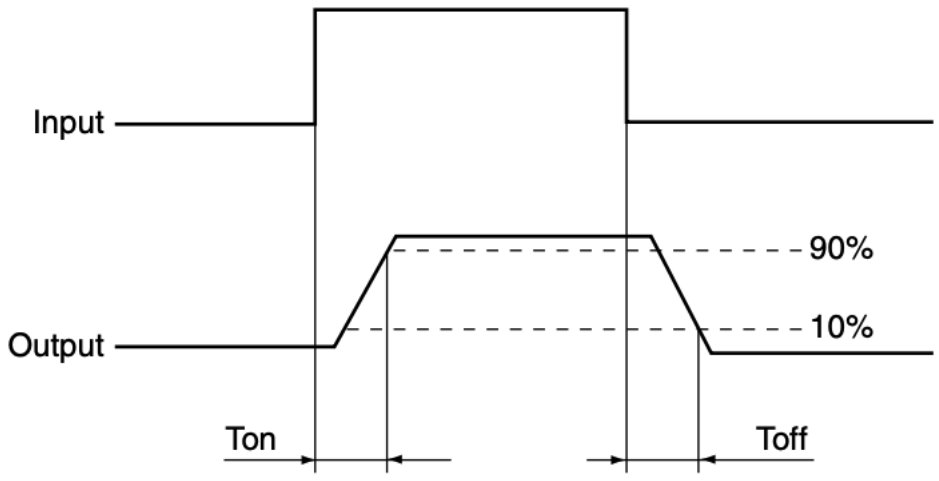
Absolute Maximum Ratings (Ambient temperature: 25°C)

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), VL = DC
	Power dissipation	P_{out}	1.6	W	
Total power dissipation		P_T	1.6	W	
I/O isolation voltage		V_{iso}	2500	Vrms	
Ambient temperature	Operating	T_{opr}	-40 to +85	℃	(Non-icing at low temperatures)
	Storage	T_{stg}	-40 to +100	℃	

Electrical Characteristics (Ambient temperature: 25°C)

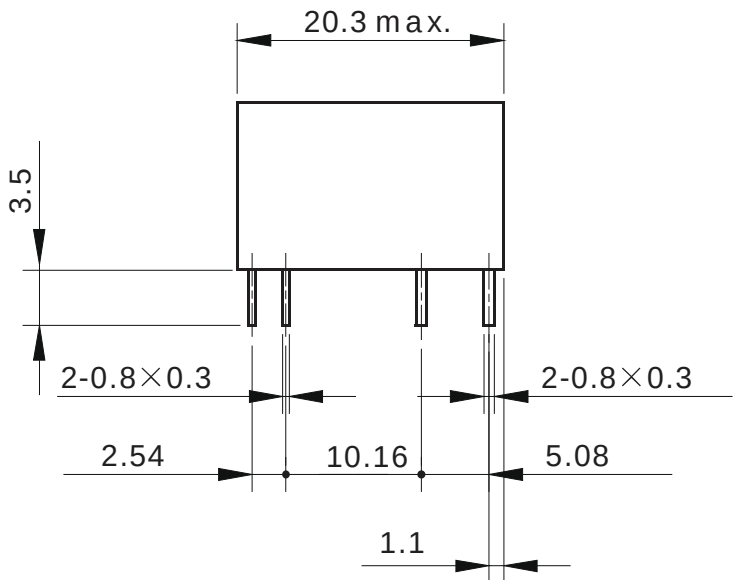
Item			Symbol	LT11004V(F)	Unit	Condition
Input	LED Operate Current	Typical	I_{Fon}	1.0	mA	I_L = 100 mA
		Maximum		3.0	mA	V_L = 10 V
	LED Turn off Current	Minimum	I_{Foff}	0.4	mA	I_L = 100 mA
		Typical		0.9	mA	V_L = 10 V
	LED Dropout Voltage	Typical	V_F	1.25	V	I_F = 50 mA
		Maximum		1.5	V	
Output	On resistance	Typical	R_{on}	0.035	Ω	I_F = 10 mA
		Maximum		0.06	Ω	I_L = Max. Within 1 s
	Off state leakage current	Maximum	I_{Leak}	10	μA	I_F = 0 mA V_L = Max.
Transfer characteristics	Turn on time*	Typical	T_{on}	0.8	ms	I_F = 10 mA
		Maximum		3.0	ms	I_L = 100 mA V_L = 10 V
	Turn off time*	Typical	T_{off}	0.1	ms	I_F = 10 mA
		Maximum		1.0	ms	I_L = 100 mA V_L = 10 V
	I/O capacitance	Typical	C_{iso}	0.8	pF	f = 1 MHz
		Maximum		1.5	pF	V_B = 0 V
	Initial I/O isolation resistance	Minimum	R_{iso}	1000	MΩ	500 V DC
	Max. operating frequency	Maximum	---	0.5	cps	I_F = 10 mA Duty factor = 50% I_L = Max., V_L = Max.

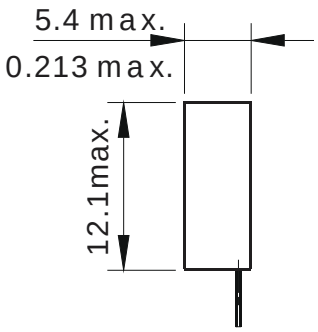
*Turn on/Turn off time



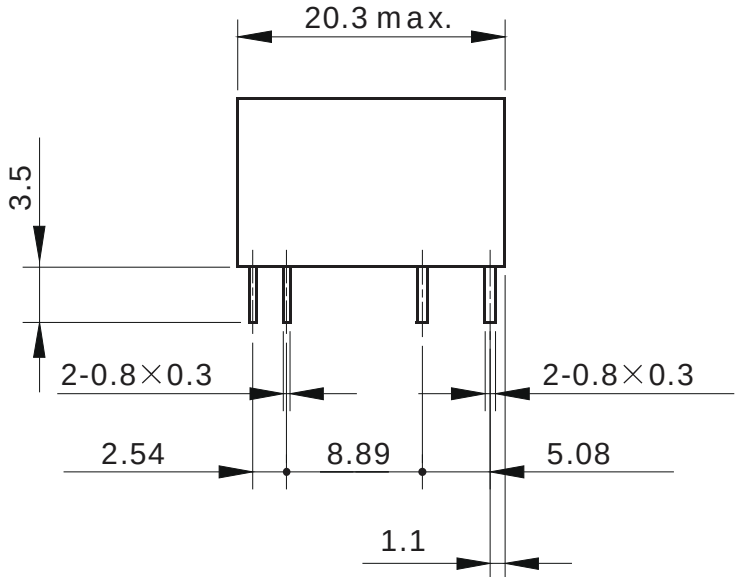
Dimensions (Unit:mm)

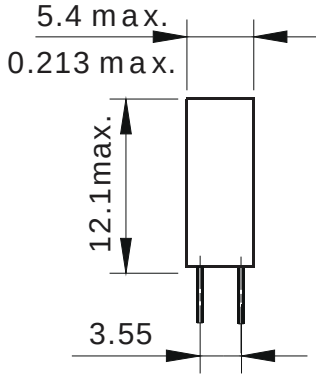
LT1OOOOV



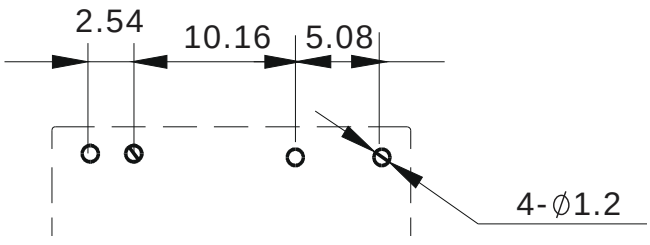


LT1OOOOV (F)

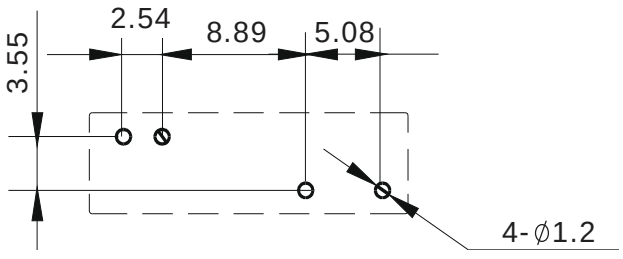




P.C.B Layout (Bottom View)(Unit:mm)

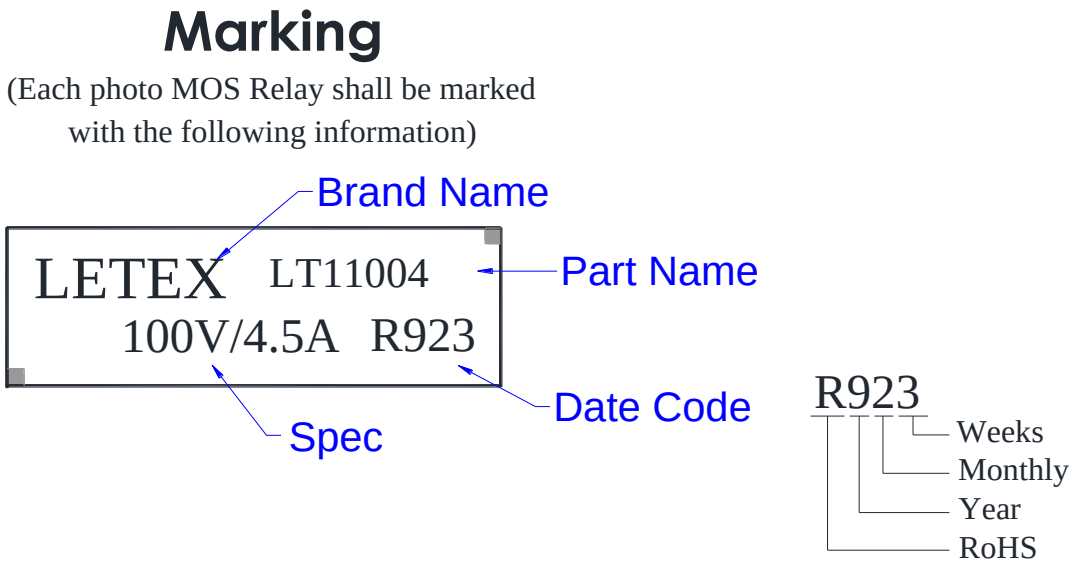


LT1 OOOOV



LT1 OOOOV (F)

Macking (Bottom View):



Note:
1. Devices are pockets in accordance with EIA standard EIA-481-A and specifications given above.
2. Packaging:1 Box 1,000 pcs