

**AUTOMOTIVE DIRECTION INDICATOR AND EMERGENCY STOP FLASHER****Features**

Supply voltage .....	8..18V	K <sub>C</sub> (f <sub>2</sub> ) constant .....	0.68
Supply current .....	<5 mA	on-off ratio .....	(f <sub>2</sub> ) 2,5
Output currrent .....	up to 250 mA	Protection operation treshold ....	20V and 30V
generation rate .....	f=1/K <sub>n</sub> ·R·C	Double frequency operation treshold ...	20 mV
K <sub>n</sub> (f <sub>1</sub> ) constant .....	1.5	Operating temperature range .....	-45....+85°C
on-off time ratio .....	2,0		

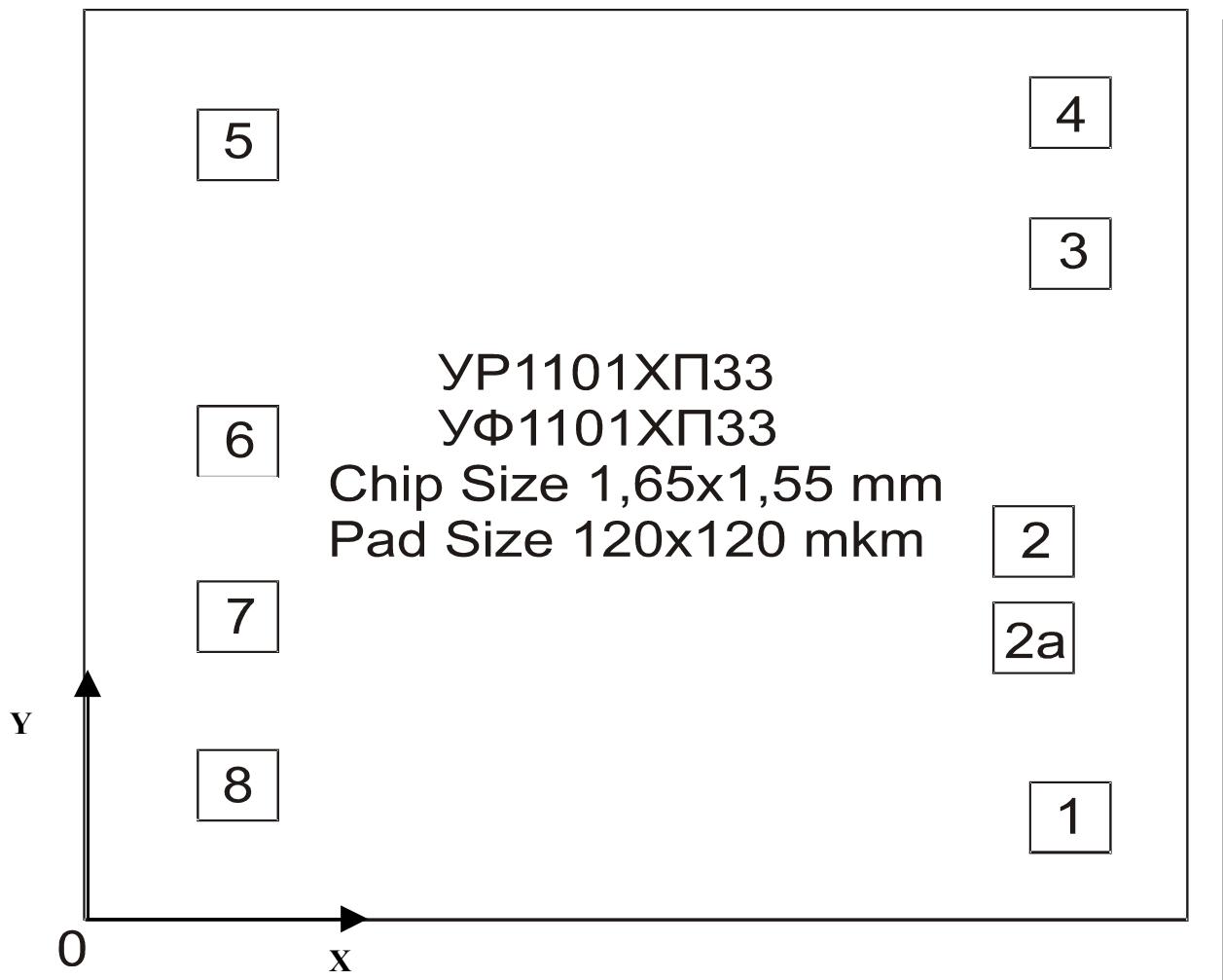
**GENERAL DESCRIPTION**

IC YP1101ХП33 – is a device for control automotive direction indicator and emergency stop flasher. In interrupter this IC inted for getting interrupder light signal (As direction indicator) and emergency stop flashing (As emergency stop flasher). Device directly drives the flasher relay. Also have internal protection for impulse noise in supply bus with VDE 839 and PTM 37.003.031-83 standarts. Without one lamp blink frequency doules. This IC also useful without relay, in various devices light and sound signallingn, in security systems, etc. IC can be produced in 8-pin plastic DIP (2.101.8-1) package or in SO-8. YP1101ХП33 is functional and pinout analog of IC MC33193.

**ELECTRIC PARAMETERS (T<sub>A</sub>=25°C)**

Parameter	Symbol	Min	Max	U <sub>CC</sub> ,V
Residual voltage	U <sub>DS3</sub>	1.0	8	
		1.3	18	
Generation coefficient	K <sub>GEN1</sub>	1.3	1.75	8
		1.3	1.75	13.5
		1.3	1.75	18
On-off ratio	K <sub>fl</sub>	0.45	0.55	8
		0.45	0.55	18
Generation coefficient at double frequency condition	K <sub>GEN2</sub>	0.63	0.75	8
		0.63	0.75	13.5
		0.63	0.75	18
On-off ratio at double frequency condition	K <sub>f2</sub>	0.35	0.45	8
		0.35	0.45	18
Current consumption (Relay off)	I <sub>CC</sub>		3.5	18
Double frequency condition ON voltage, mV	U <sub>ITP7</sub>	46	56	13.5

Pad Location:



Pad coordinates, and functions

Pad N	DI P N	SO-8 N	ADC PIN	Coordinates, $\mu\text{m}$	
				x	y
1	1	1	$U_{ss}$	1415	115
2a	2	2	$U_{cc}$	1360	421
2	2	2	$U_{cc}$	1360	585
3	3	3	Relay	1415	1075
4	4	4	Oscillator	1415	1315
5	5	5	Oscillator	170	1260
6	6	6	Enable	170	755
7	7	7	Fault Detector	170	457
8	8	8	Starter	170	170