



PROTON

JSC «Proton»

Phototransistor chip FT231

Description

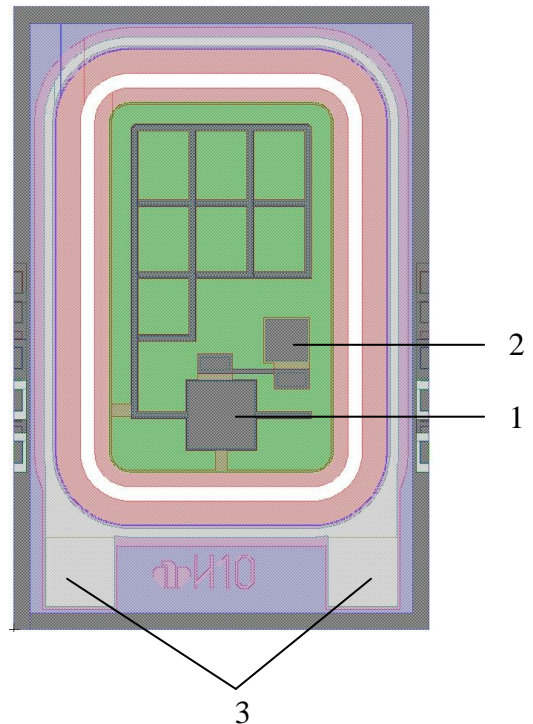
FT231 chip is fabricated using Silicon Bipolar process technology with high-ohmic polysilicon shunt. It is designed to be used in optocouplers. The maximum spectral response range is 0.85-0.92 nm.

Features

- Photosensitive Area - 0.7x1.0 mm
- Chip Size - 1x1.5 mm
- Chip Thickness - 0.35±0.02 mm
- High-ohmic Shunt
- Contact pads material - Aluminum;
- Metallization: bottom - Si

Absolute Maximum Rating

Storage Temperature	-65°C to 150°C
Operating Temperature	-60°C to 125°C



- 1 - Emitter
2 - Base
3 - Collector

Electrical Characteristics (T= 25°C)

Parameter	Symbol	Unit	Min.	Typ.	Max.	Conditions
Collector-Emitter Dark Current	I_{CE0}	μA		0.05	0.1	$V_{CE} = 70 V$
Collector-Emitter Breakdown Voltage	BV_{CEOL}	V	150	160		$I_C = 10 mA$
Collector-Emitter Saturation Voltage	$V_{CE SAT}$	V	-	0.25	0.4	$I_B = 50 \mu A, I_C = 2 mA$
Current Transfer Ratio	h_{21E}		100		300	$I_B = 50 \mu A, V_{CE} = 10 V$
Polysilicon Shunt Resistance	R	MOhm	0.125	0.5	1.0	$V_{EB} = 5 V$