



PROTON

JSC “Proton”

Photodiode array chip FM052P

Description

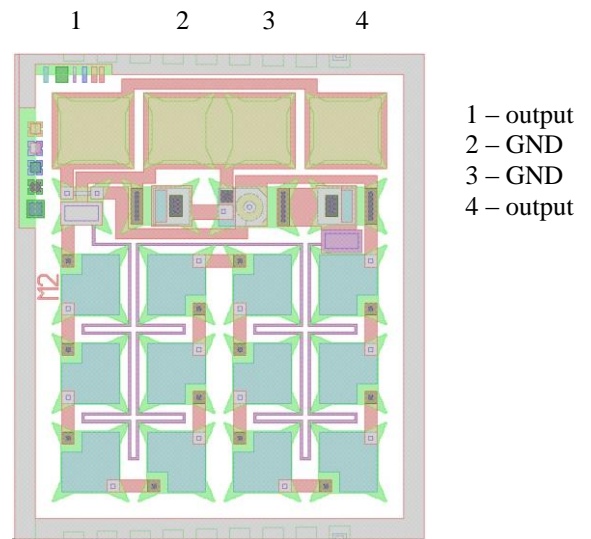
FM052P chip is fabricated using Silicon Bipolar process technology. This chip is designed to be used in MOS-relay.
 New monolith polysilicon structure.
 No delamination at high temperatures.

Features

- 12 photodiodes
- Thyristor discharge circuit
- Contact pad`s material – Aluminium
- Chip size 0.8 x 0.95±0.01 mm
- Chip thickness 0.32±0.02 mm

Absolute maximum ratings

Storage temperature	- 65 °C to 150 °C
Operating Junction Temperature	- 55 °C to 125 °C



Electrical characteristics (T = 25 °C)

Parameter	Symbol	Unit	Min.	Typ.	Max.	Condition
Open Circuit Voltage	V _{OC}	V	6.5	6.8	-	1
Short Circuit Current	I _{SC}	μA	1.5	2.0	-	1
Output Voltage	V _{OUT}	V	-	-	0.9	2
Discharge Resistor	R _{DIS}	MOhm	5.0	-	25.0	
Turn-On Time	T _{ON}	ms		0.24	1.0	3
Turn-Off Time	T _{OFF}	ms		0.1	0.1	3

1 – Light source with peak wavelength $\lambda = 840 \pm 20$ nm that provides surface irradiance $E_e = 20$ mW/cm² is used.

2 – No light. I_F = 100 μA.

3 – Typical value at I_{RLED} = 5 mA, C_L = 330 pF. Coupled with LED $\Phi_e = 1000$ uW with peak wavelength $\lambda = 840 \pm 20$ nm.