

## Photodiode array chip FM055P

### Description

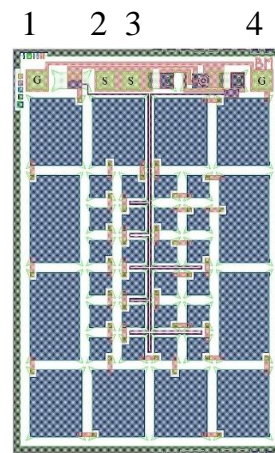
FM055P chip is fabricated using Silicon Bipolar process technology. The chip is designed to be used in MOS-relay, including SiC transistors, with threshold voltage 3-7V.

### Features

- 36 photodiodes
- Thyristor discharge circuit
- Contact pad's material – Aluminium
- Contact pad's size 0.10x0.10 mm
- Chip size 1.5 x 2.22 mm ± 0.01 mm
- Chip thickness 0.32 mm ± 0.02 mm

### Absolute maximum ratings

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



- 1- Output
- 2 - GND
- 3 - GND
- 4 - Output

### Electrical characteristics (T = 25 °C)

Parameter	Symbol	Unit	Min.	Typ.	Max.	Condition
Open Circuit Voltage	V <sub>OC</sub>	V	18.0	20.0	-	1
Short Circuit Current	I <sub>SC</sub>	μA	1.6	3.2	-	1
Output Voltage	V <sub>OUT</sub>	V	-	-	0.9	2
Discharge Resistor	R <sub>DIS</sub>	MOhm	5.0	-	25.0	
Turn-On Time	T <sub>ON</sub>	ms	-	0.5	1.0	3
Turn-Off Time	T <sub>OFF</sub>	ms	-	0.05	0.3	3

- 1 – Light source with peak wavelength  $\lambda = 850 \pm 20$  nm that provides surface irradiance  $E_e = 20$  mWt/cm<sup>2</sup>
- 2 – No light. I<sub>F</sub> = 100 μA
- 3 - Typical value at I<sub>RLED</sub> = 10 mA, C<sub>L</sub> = 1000 pF. The PDA is coupled with LED P<sub>0</sub> > 2000 μW with peak wavelength  $\lambda = 850 \pm 20$  nm.