

Photodiode array chip FM053P

Description

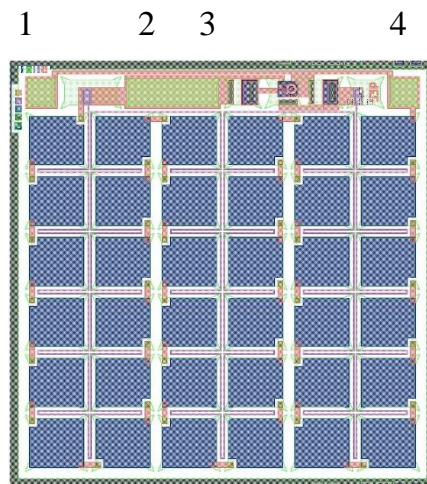
FM053P chip is fabricated using Silicon Bipolar process technology. The chip is designed to be used in MOS-relay, including SiC transistors, with threshold voltage 3-7V.

Features

- 36 photodiodes
- Thyristor discharge circuit
- Contact pad's material – Aluminium
- Contact pad's size 0.13x0.13 mm
- Chip size 2.0 x 2.0 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 _{OC}	V	18.0	20.0	-	1
Short Circuit Current	I _{SC}	μA	1.6	3.2	-	1
Output Voltage	V _{OUT}	V	-	-	0.9	2
Discharge Resistor	R _{DIS}	MOhm	5.0	-	25.0	
Turn-On Time	T _{ON}	ms	-	0.5	1.0	3
Turn-Off Time	T _{OFF}	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/cm²

2 – No light. I_F = 100 μA

3 - Typical value at I_{RLED} = 10 mA, C_L = 1000 pF. The PDA is coupled with two LEDs P₀ = 2000 μW each with peak wavelength $\lambda = 850 \pm 20$ nm.