

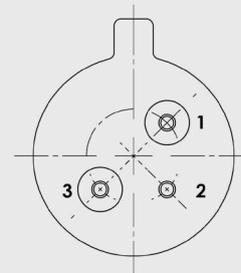
Very fast and small radiation source for use with thermopiles and pyroelectric detectors in NDIR gas analysis and other applications.

MEMS Infrared Radiation Source C-MOSI®-100

Active Area	1.0 x 1.0	mm ²
Hot Resistant	25 ± 5	Ω
Temperature Coefficient¹	typ. 1000	ppm/K
Time Constant	typ. 8	ms
Nominal Power Consumption	250	mW
Operation Voltage²	typ. 2.5	V
Operation Current²	typ. 100	mA
Active Area Temperature^{3,5}	600	°C
Spectral Output Range⁶	typ. 2 - 15	μm
Mass	~ 1	g
Housing	TO46 (modified)	
Expected Lifetime^{4,5}	> 10,000 h at 700 °C > 100,000 h at 600 °C	

The current data are based on simulations and tests. They are subject to change during the next evaluation steps.

- ¹ 0 °C - 700 °C
- ² at 25 Ω
- ³ at nominal power (0.25 W)
- ⁴ at 10 Hz, 50 % duty cycle, MTTF 63 % (membrane fracture)
- ⁵ at T_{amb} = 25 °C
- ⁶ without window



Pin Assignment
(bottom view)

- Pin 1 Power
- Pin 2 Case
- Pin 3 Power

Absolute Max. Rating

Power	0.35	W
Housing Temperature	200	°C
Active Area Temperature	750	°C

March 1st 2018 – technology revision 2 – subject to change without notice

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Housing T046

