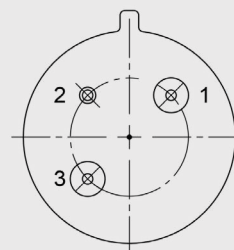
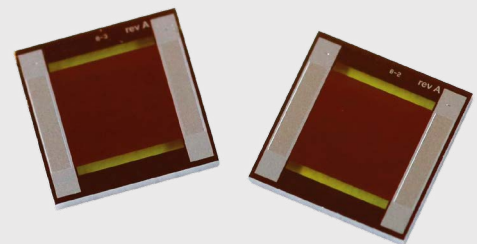
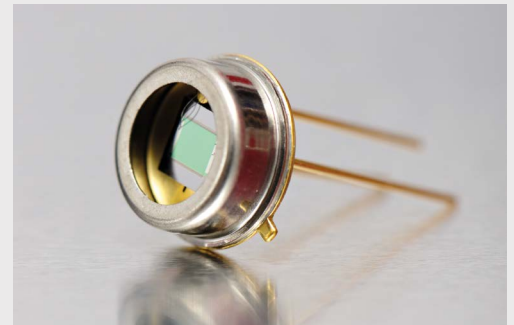


Fast radiation source for use with thermopiles and pyroelectric detectors in NDIR gas analysis and other applications.

## MEMS Infrared Radiation Source C-MOSI®-500

<b>Active Area</b>	2.2 x 2.3	mm <sup>2</sup>
<b>Hot Resistant</b>	19 ± 5	Ω
<b>Temperature Coefficient<sup>1</sup></b>	typ. 1250	ppm/K
<b>Time Constant</b>	typ. 15	ms
<b>Nominal Input Power</b>	600	mW
<b>Operation Voltage<sup>2</sup></b>	typ. 3.4	V
<b>Operation Current<sup>2</sup></b>	typ. 175	mA
<b>Active Area Temperature<sup>3,5</sup></b>	650	°C
<b>Spectral Output Range<sup>6</sup></b>	2 - 15	μm
<b>Mass</b>	~ 1	g
<b>Housing</b>	TO39 (modified)	
<b>Expected Lifetime<sup>4,5</sup></b>	> 5,000 h at 800 °C > 100,000 h at 650 °C	



**Pin Assignment**  
(bottom view)

Pin 1 Power  
Pin 2 Case  
Pin 3 Power

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

- <sup>1</sup> 0 °C - 700 °C
- <sup>2</sup> at 19 Ω
- <sup>3</sup> at nominal power (0.6 W)
- <sup>4</sup> at 10 Hz, 50 % duty cycle, MTTF 63 % (membrane fracture)
- <sup>5</sup> at T<sub>amb</sub> = 25 °C
- <sup>6</sup> without window

### Absolute Max. Rating

Input Power	900	mW
Housing Temperature	200	°C
Active Area Temperature	800	°C

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

