

# ROITHNER LASERTECHNIK

SCHOENBRUNNER STRASSE 7, 1040 VIENNA, AUSTRIA

TEL: +43 -1- 586 52 43-0 FAX: +43 -1- 586 52 43-44

office@roithner-laser.com www.roithner-laser.com

## FAT-685-40

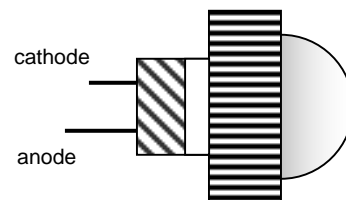
## TECHNICAL DATA

### RED HIGH POWER LED ARRAY

Wavelength: **typ. 685 nm**

Optical power: **typ. 250 mW at 300 mA**

Package: **M18 x 1 thread package**



#### Absolute Maximum Ratings (T<sub>c</sub> = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
DC Forward Current	I <sub>F</sub>	350	mA
Pulse Forward Current *)	I <sub>FP</sub>	2.5	A
Allowable Reverse Current	I <sub>R</sub>	50	μA
Power Dissipation	P <sub>D</sub>	3	W
Operating Temperature	T <sub>OP</sub>	-60 .. +75	°C
Storage Temperature	T <sub>STG</sub>	-60 .. +95	°C

\*) Pulse width ≤ 10 μs, duty cycle ≤ 0.1

#### Optical-Electrical Characteristics (T<sub>c</sub> = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
DC Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 300 mA	12.5	13.0	14.0	V
DC Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5 V			50	μA
Optical Output Power	P <sub>O</sub>	I <sub>F</sub> = 300 mA	180	250	-	mW
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> = 300 mA	675	685	695	nm
Spectrum Half Width FWHM	Δλ	I <sub>F</sub> = 300 mA	-	40	-	nm
Viewing Angle FWHM	2θ <sub>1/2</sub>	I <sub>F</sub> = 300 mA		40		°
Rise Time	t <sub>r</sub>	I <sub>F</sub> = 300 mA		80		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> = 300 mA		100		ns
Thermal Resistance	R <sub>T</sub>	-		20		K/W