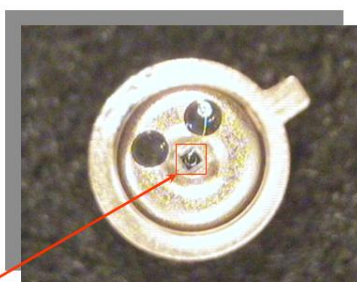


Features

- ☺ Peak emission wavelength: 4.30 μm
- ☺ Narrow Spectrum emission
- ☺ High radiant output power
- ☺ Narrow directivity
- ☺ High speed response



LED CHIP

Applications

- ☺ Light source for CO₂ gas

Accessories (optional)

- [Driver for LEDs D-31M](#)

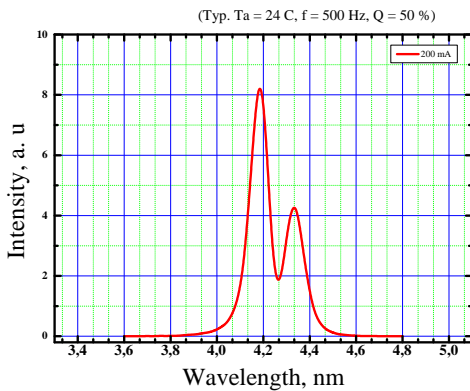
Absolute maximum ratings (Ta=25 °C, unless otherwise noted)

Package	Parameter	Symbol	Value	Unit
TO-18	Reverse voltage	V_r	0.25	V
	Forward current	I_f	200	mA
	Pulse forward current (Pulse width = 2.0 μs , Duty ratio = 10 %)	I_{fp}	2	A
	Forward current derating rate (Ta>25 °C)	IFT	2	mA/°C
	Power dissipation	P	2	μW
	Operating temperature	Topr	-30 to 85	°C
	Storage temperature	Tstg	-40 to 100	°C
Size	Weight	m	0.65	g
	D	D	9.0	mm
		H	18.5	

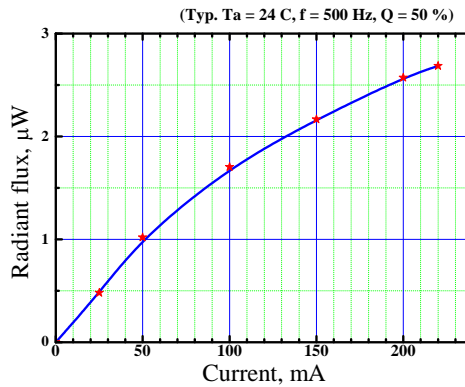
Electrical and optical characteristics (Ta=25 °C)

Parameter	Symbol	Condition	LED-430 - NS			Unit
			Min.	Typ.	Max.	
Peak emission	λ_p	$I_F=50$ mA	4.25	4.30	4.35	μm
Spectral half width	$\Delta\lambda$	$I_F=50$ mA	150	200	240	nm
Radiant flux	ϕ_e	$I_F=200$ mA	1.5	2	4	μW
Forward voltage	V_F		0.25	0.3	0.4	V
Reverse current	I_R	$V_R=0.4$ V	3	5	9	mA

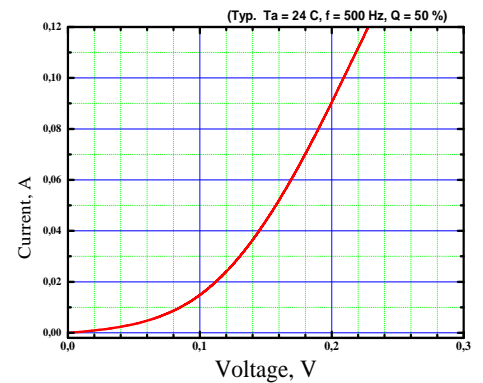
Emission spectrum



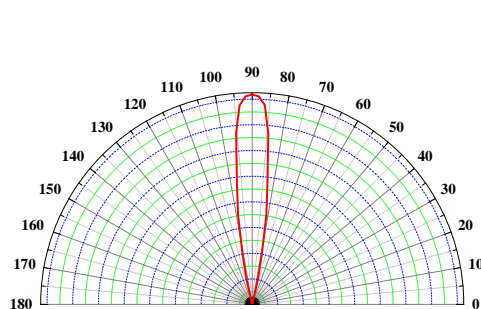
Radiant flux vs. forward current



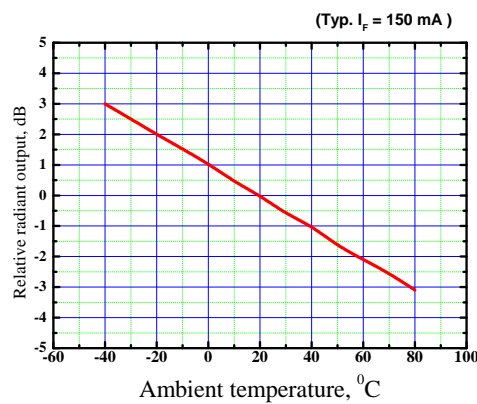
Forward current vs. forward voltage



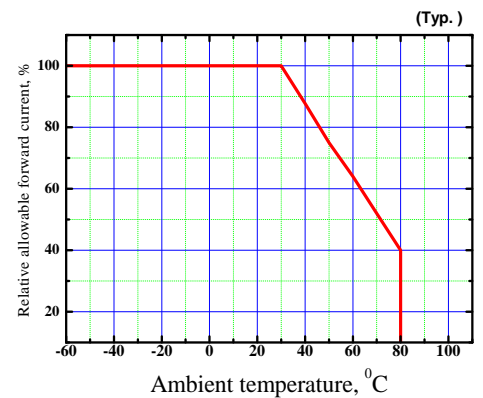
Directivity



Radiant output vs. ambient temperature



Allowable forward current vs. ambient temperature



■ Dimensional outlines (unit: mm)

