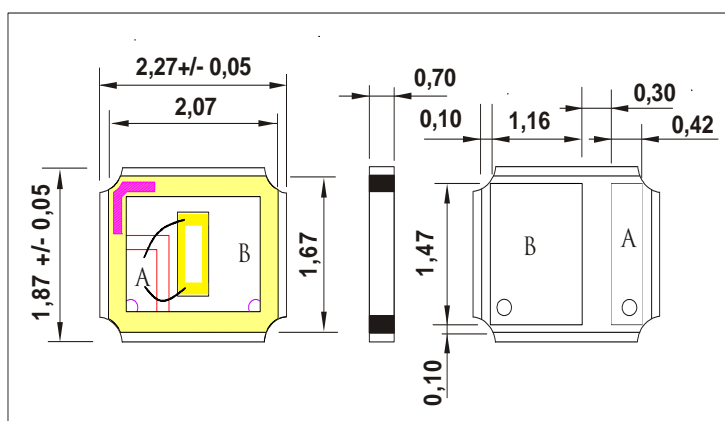


# IR-LED - Edged Corner Bonded 870nm FQA25586AVC

## Features

- \* Standard design LED for general purpose  
Based on double hetero structure of GaAlAs
- \* Fast switching time : typical <40ns
- \* LTCC-Package with Ag-slug technology for low thermal resistance
- \* High-puls current drivable
- \* Edged bonded chip design with pad and wire free emitting center
- \* Application : Open-Air communication / IrDa  
IR-Flash-Lights  
Medical instruments  
Light interrupter and switches



## Electrical and optical characteristics and absolute maximum ratings ( Ta=25°C unless otherwise noted )

Symbol	Parameter	MIN	Typ	MAX	Unit	Test conditions
I <sub>F</sub>	DC Forward current			100	mA	R <sub>therm</sub> < 100 K/W
I <sub>PEAK</sub>	Peak Forward current			3000	mA	T <sub>p</sub> < 10µsec. ; T=1:200 ; R <sub>therm</sub> < 50 K/W
V <sub>F</sub>	Forward Voltage	1,15	1,5	2,1	V	IF = 100mA
V <sub>R</sub>	Reverse Voltage	5			V	I <sub>rev</sub> = 100µA
λ <sub>Peak</sub>	Peak Wavelength	860	870	885	nm	IF = 50mA
Δλ <sub>0,5</sub>	Bandwidth of half power	25	30		nm	IF = 50mA
t <sub>f</sub>	Fall time		40		ns	IF = 100mA
t <sub>r</sub>	Rise time		40		ns	IF = 100mA
Φ <sub>E</sub>	Total Power Output	35		65	mW	IF = 100mA
I <sub>E</sub>	Radiant Intensity	10			mW/sr	IF = 100mA
A	Chip size		0,31		mm <sup>2</sup>	Chip size : 870µmX360µm
2Φ <sub>0,5</sub>	Emission Angle		130		deg.	Φ <sub>E</sub> = 50%
TK <sub>VF</sub>	Temp.Coeff. of Forward Voltage		- 2		mV/K	*
TK <sub>F</sub>	Temp.Coeff. of Radiant Power		- 0,4		%/K	*
T <sub>Operating</sub>	Operating Temperature	- 25		85	°C	
T <sub>Storage</sub>	Storage Temperature	- 25		85	°C	
T <sub>Soldering</sub>	Soldering Temperature			260	°C	5mm from case @5 sec.
Θ <sub>j-PIN</sub>	Thermal Resistance			50	K/W	
P <sub>tot</sub>	Total Power Dissipation			220	mW	derate above 45°C 3,5mW/K

\* values only for information

All optical measurements are based on accuracy of +/-11%.

R<sub>therm</sub> : heat sink capability by PCB or other constructions

Order Informations : FQA25586AVC-TR Tape & Reel

Fietje reserves the right to make changes at any time in order to improve design and to supply the best product possible, contact Fietje for latest device specification sheets before using.