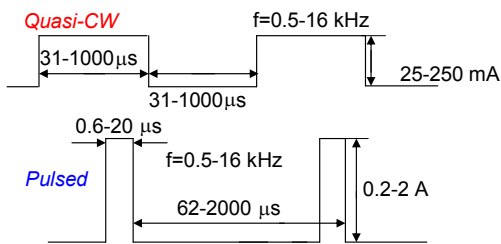
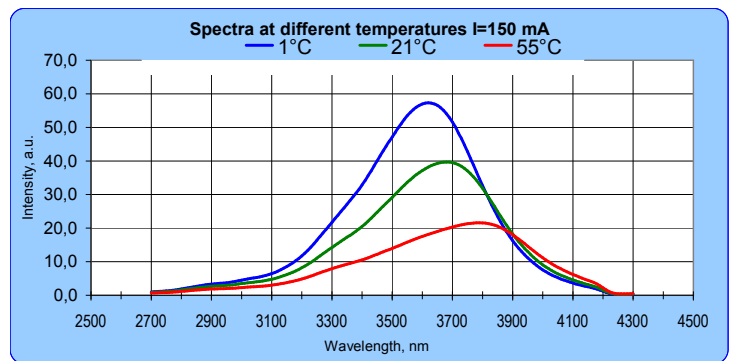
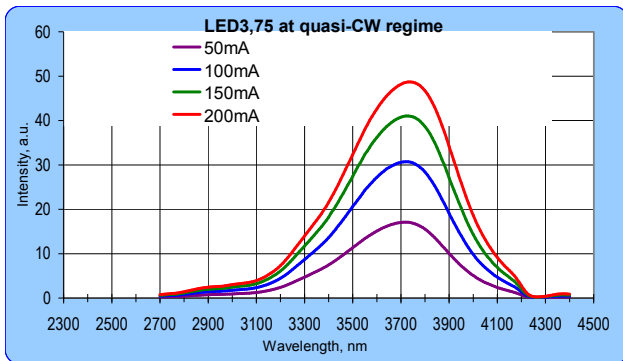


Light Emitting Diodes with central wavelength 3,75 μm series are based on heterostructures grown on InAs substrates by MOCVD. InAsSb is used in the active layer. Wide band gap solid solutions InAsSbP with P content 50% are used for good electron confinement.

Parameters	Units	Conditions	Ratings		
			Min	Typ	Max
Peak emission wavelength	μm	T=300 K	3,70	3,75	3,85
FWHM of the emission band	nm	150 mA CW	500	600	700
Quasi-CW Optical Power	μW	200 mA qCW	20	30	40
Pulsed Optical Power	μW	1 A	180	200	220
Switching Time	ns	T=300 K	10	20	30
Operating Temperature Range, $^{\circ}\text{C}$	-240 $^{\circ}$ \div +50 $^{\circ}$				
Emitting Area, μm	300x300				
Soldering temperature	260 $^{\circ}\text{C}$				
Package					
SMD type package 3x3 mm based on high thermal conductivity ceramics					MID IR LED-SMD3
SMD type package 5x5 mm based on high thermal conductivity ceramics					MID IR LED-SMD5
SMD type package 5x5 mm based on high thermal conductivity ceramics with microreflector					MID IR LED-SMD5R



Maximum current is 220 mA at quasi-CW
Maximum pulsed current is 1 A (duration 500 ns, repetition rate 2 kHz)
Optimal operating current is 150-200 mA at quasi-CW

