



# LED38

## Light Emitting Diode

Parameter	Rating	units	Conditions
Peak emission wavelength	3.8	$\mu\text{m}$	300K
Spectral bandwidth (FWHM)	0.4	$\mu\text{m}$	300K
Radiant output power	60	$\mu\text{W}$	2.5% duty cycle, 3A pulse current
Operating currents	500-600	mA*	Pulsed
	2.0-2.5	A**	Peak current
Rise time	200	nS	300K
Temperature drift of band	2	nm/K	
Encapsulation	TO18 (TO-5 / TO-8 opt.)		
Lens/Window material	Sapphire window		
Field of View	60	deg.	
Efficiency, % (not less)	0.04		
Application	Radiation absorbed by hydrocarbon (such as methane), Environmental monitoring, IR spectroscopy		

### Notes:

- recommended detector is room temperature photovoltaic MCT detector model PDI-4 or TE-cooled photovoltaic MCT model PDI-2TE-4; or room temperature photoconductive MCT detector PCI-5 or TE-cooled photoconductive detector model PCI-2TE-4
- DO NOT connect/disconnect the LED while the pulse generator is in operation
- Square pulses of 500 $\mu\text{s}$  duration and 1KHz repetition frequency
- Square pulses of 50 $\mu\text{s}$  duration and 500Hz repetition frequency

