

LED with a Parabolic Reflector



LED1800P

Description

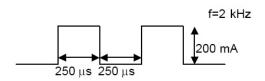
The LED1800P emits light with a spectral output centered at 1850 nm. This LED is composed of heterostructures (HS) grown on a GaSb substrate. The diode is in a TO-18R Parabolic Reflector package.

Specifications

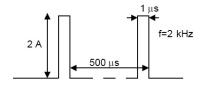
It is recommended that this diode be used in a quasi-CW or pulsed regime (see diagram below). The operating and storage temperature range is from 5° C to 90° C.



Quasi-CW







Optical Specifications					
	Typical				
Center Wavelength	1850 nm ± 50 nm				
FWHM	150 nm				
Optical Power (Minimum/Typical) @ 100 mA	0.9 mW				
Optical Power Pulsed Mode @ 2A	20.0 mW				
Switching Time, ns	30 ns				

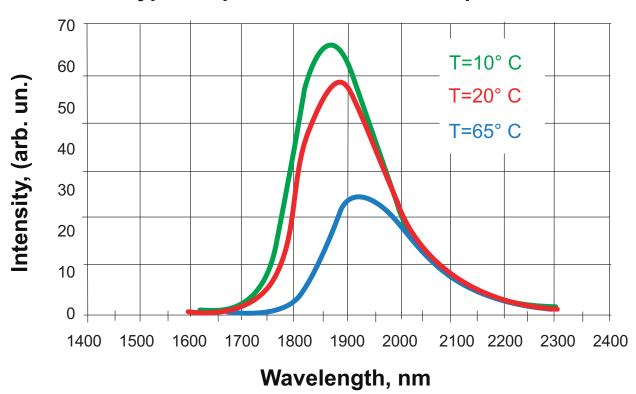
Soldering Specifications						
	Conditions					
Manual Soldering	295 °C ± 5 °C , for less than 3 seconds					
Wave Soldering	260 °C ± 5 °C , for less than 5 seconds					
Reflow Soldering	Preheating: 70 °C to 80 °C , for 30 seconds					
	Soldering: 245 °C ± 5 °C , for less than 5 seconds					



Cleaning Solvents								
Solvent	Ethyl Alcohol	Isopropyl Alcohol	Propanol	Acetone	Chloroseen	Tricloroethylene	MKS	
Approved	Yes	Yes	Yes	No	No	No	No	

Typical Spectral Intensity Distribution

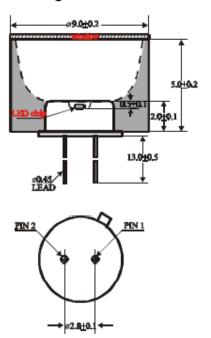
Typical Spectra at Different Temperatures





Drawing

Package TO-18 with Reflector



The anode pin is market by a red dot

Figure 1: LED1800P. All Dimensions in mm

Precautions and Warranty Information

These products are ESD (electro static discharge) sensitive and as a result are not covered under warranty. In order to ensure the proper functioning of an LED care must be given to maintain the highest standards of compliance to the maximum electrical specifications when handling such devices. The LEDs are particularly sensitive to any voltage that exceeds the absolute maximum ratings of the product. Any applied voltage in excess of the maximum specification will cause damage and possible complete failure to the product. The user must use handling procedures that prevent any electro static discharges or other voltage surges when handling or using these devices.