

L810-40

High Power Metal Stem LED Lamp

The series of L810-40 __ __ is an GaAlAs LED mounted on a metal stem and covered with epoxy resin or hermetically sealed with f5 glass-lens can.

On forward bias it emits a high power radiation, which peaks at 810nm.

Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	170	mW	T _a =25°C
Forward Current	I _F	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	500	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Operating Temperature	T _{OPR}	-30 ~ +90	°C	T _a =25°C
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	260	°C	

‡ Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡ Soldering condition: Soldering condition must be completed within 3 seconds at 260°C

Electro-Optical Characteristics [T_a=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.60	1.80	V
Reverse Current	I _R	V _R =5V			10	uA
Peak Wavelength	λ _P	I _F =50mA	790	810	830	nm
Half Width	Δλ	I _F =50mA		35		nm
Rise Time	t _r	I _F =50mA		65		ns
Fall Time	t _f	I _F =50mA		40		ns

Total Radiant Power and Radiant Intensity at I_F=50mA [T_a=25°C]

Type No.	Total Radiant Power unit:mW			Radiant Intensity unit:mW/sr			Viewing Half Angle
	Minimum	Typical	Maximum	Minimum	Typical	Maximum	
L810-40K00	9	15			6		±40°
L810-40K42	6	12			60		±6°
L810-40M00	11	18			10		±40°
L810-40M32	8	13			40		±10°
L810-40T52	4	6.5			4		±55°

‡ Radiant Intensity is measured by Tektronix J6512

‡ Total Radiated Power is measured by Photodyne #500

Outer dimension (Unit: mm)

