

L890-40 _ _ _ High Power Metal Stem LED Lamp

The series of L890-40 _ _ _ is an GaAlAs LED mounted on a metal stem and covered with epoxy resin or hermetically sealed with $\Phi 5$ glass-lens can.

On forward bias it emits a high power radiation, which peaks at 880nm.

◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	150	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current	IFP	500	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Operating Temperature	TOPR	-30 ~ +90	°C	Ta=25°C
Storage Temperature	TSTG	-30 ~ +100	°C	
Soldering Temperature	TSOL	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 [Ta=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.45	1.70	V
Reverse Current	IR	VR=5V			10	uA
Peak Wavelength	λP	IF=50mA	865	880	895	nm
Half Width	$\Delta\lambda$	IF=50mA		65		nm
Rise Time	tr	IF=50mA		800		ns
Fall Time	tf	IF=50mA		400		ns

◆ Total Radiant Power and Radiant Intensity at IF=50mA [Ta=25°C]

Type No.	Total Radiant Power unit:mW			Radiant Intensity unit:mW/sr			Viewing Half Angle
	Minimum	Typical	Maximum	Minimum	Typical	Maximum	
L890-40K00	7	12			3		$\pm 40^\circ$
L890-40K42	4	7			50		$\pm 6^\circ$
L890-40M00	8	14			7		$\pm 40^\circ$
L890-40M32	7	11.5			40		$\pm 10^\circ$
L890-40T52	3	5			3		$\pm 55^\circ$

‡ Radiant Intensity is measured by Tektronix J6512

‡ Total Radiated Power is measured by Photodyne #500.

◆ Outer dimension (Unit: mm)

