Marubeni

L850-40 _ _ _ (LN850- _ _ _) High Power Metal Stem LED Lamp

The series of L850-40 _ _ _is an GaAlAs LED mounted on a metal stem and covered with epoxy resin or hermetically sealed with Φ5 glass-lens can.
On forward bias it emits a high power radiation, which peaks at 850nm.

♦Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	160	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current	IFP	1000	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]

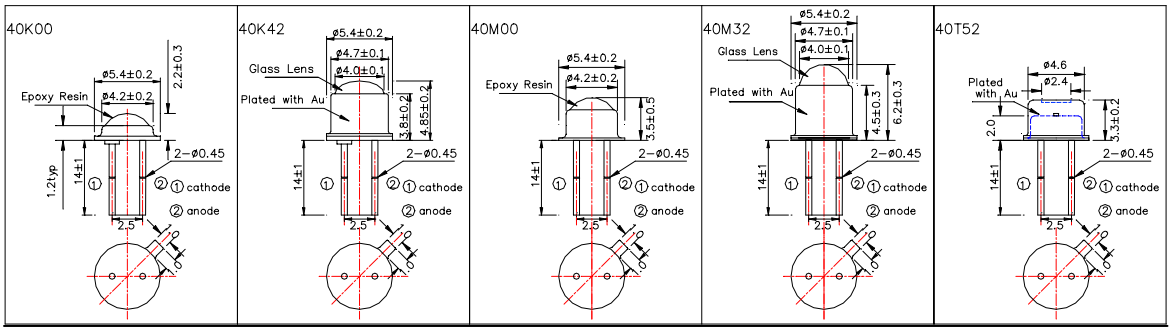
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.55	1.70	V
Reverse Current	IR	VR=5V			10	uA
Peak Wavelength	λP	IF=50mA	835	850	865	nm
Half Width	Δλ	IF=50mA		40		nm
Rise Time	tr	IF=50mA		30		ns
Fall Time	tf	IF=50mA		25		ns

♦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	
L850-40K00	12	20			8		±40°
L850-40K42	8	13			80		±6°
L850-40M00	13	22			12		±40°
L850-40M32	11	18			75		±10°
L850-40T52	5	8			5		±55°

‡Radiant Intensity is measured by Tektronix J6512
‡Total Radiated Power is measured by Photodyne #500.

♦Outer dimension (Unit: mm)



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