

FL940-03-80 High Power type LED

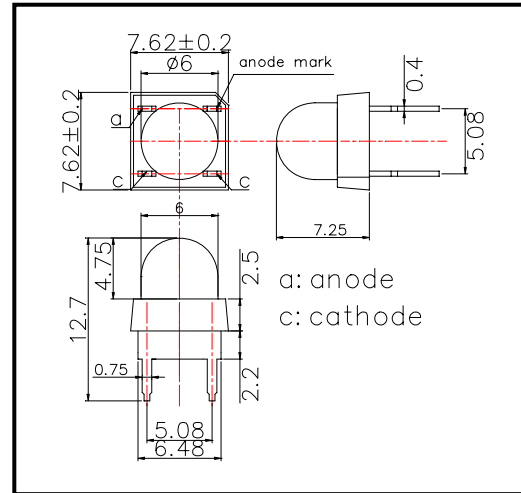
FL940-03-80 is an AlGaAs LED mounted on a lead frame and molded with super beam lens. On forward bias, it emits a band of visible light which peaks 940nm.

These devices are intended to be operated at pulsed current of 4A under maximum 3.5V for stable long life.

◆ Specifications

1) Product Name	Super Flux mold type LED
2) Type No.	FL940-03-80
3) Chip	
(1) Chip Material	GaAlAs
(2) Chip Dimension	800um*800um
(3) Peak Wavelength	940nm typ.
4) Package	
(1) Type	Super Beam type LED
(2) Resin Material	Epoxy Resin
(3) Lead Frame	Silver Plated Copper

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	570	mW	Ta=25°C
Forward Current	IF	400	mA	Ta=25°C
Pulse Forward Current	IFP	4000	mA	Ta=25°C
Reverse Voltage	VR	10	V	Ta=25°C
Operating Temperature	TOPR	-30 ~ +85	°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=200mA		1.30	1.40	V
Pulsed Forward Voltage	VF	IFP=4A		2.7	3.5	V
Reverse Current	IR	VR=10V			10	uA
Total Radiated Power	PO	IF=200mA	30.0	45.0		mW
Radiant Intensity	IE	IF=200mA		135		mW/sr
Peak Wavelength	λP	IF=50mA	930	940	950	nm
Half Width	Δλ	IF=50mA		40		nm
Viewing Half Angle	θ 1/2	IF=50mA		±15		deg.
Rise Time	tr	IF=50mA		1000		ns
Fall Time	tf	IF=50mA		500		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.