

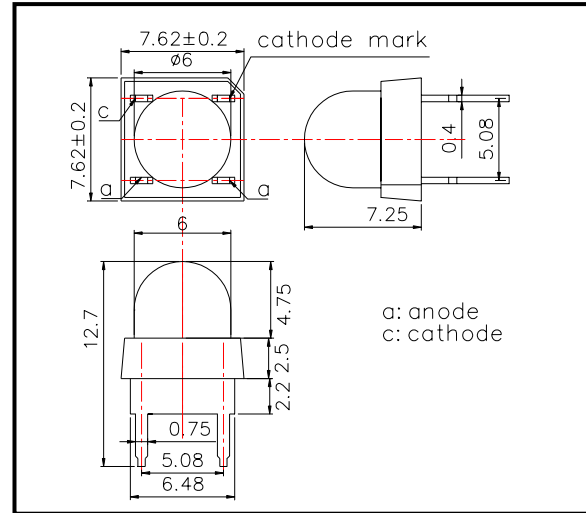
# FL740-03-80 High Power type LED

FL740-03-80 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 740nm.

◆Outer dimension (Unit: mm)

◆Specifications

- 1) Product Name Super Flux mold type LED
- 2) Type No. FL740-03-80
- 3) Chip
  - (1) Chip Material GaAlAs
  - (2) Chip Dimension 800um\*800um
  - (3) Peak Wavelength 740nm typ.
- 4) Package
  - (1) Type Super Beam type LED
  - (2) Resin Material Epoxy Resin
  - (3) Lead Frame Silver Plated Copper



◆Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P <sub>D</sub>	450	mW	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	250	mA	T <sub>a</sub> =25°C
Pulse Forward Current	I <sub>FP</sub>	2000	mA	T <sub>a</sub> =25°C
Reverse Voltage	V <sub>R</sub>	10	V	T <sub>a</sub> =25°C
Operating Temperature	T <sub>OPR</sub>	-30 ~ +85	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +100	°C	
Soldering Temperature	T <sub>SOL</sub>	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<sub>a</sub>=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =100mA		1.65	2.1	V
Pulsed Forward Voltage	V <sub>F</sub>	I <sub>FP</sub> =2A		3.2		V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =10V			10	uA
Total Radiated Power	P <sub>O</sub>	I <sub>F</sub> =100mA	16.0	20.0		mW
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =100mA		60		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =50mA	725	740	755	nm
Half Width	Δλ	I <sub>F</sub> =50mA		25		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =50mA		±15		deg.
Rise Time	t <sub>r</sub>	I <sub>F</sub> =50mA		80		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =50mA		80		ns

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.