

Lead (Pb) Free Product – RoHS Compliant

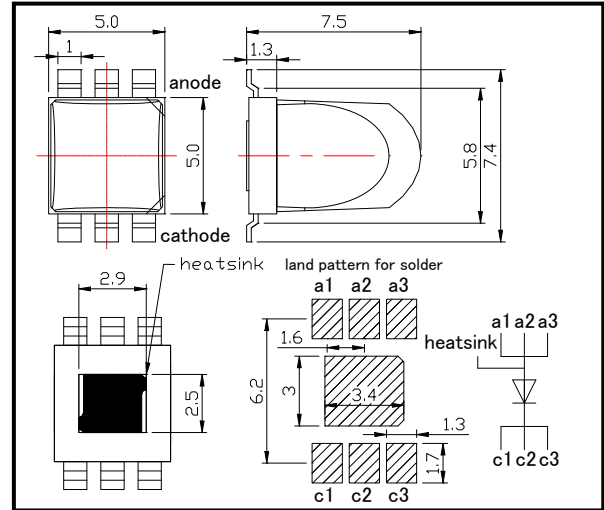
SMB760-1100-01 High Power type Top LED with Lens

SMB760-1100-01 is an AlGaAs LED mounted on copper heat sink with a 5*5 mm package and molded with super beam lens. These devices are intended to be operated at pulsed current of 2A under maximum 4.0V for stable long life.

◆Outer dimension (Unit: mm)

◆Specifications

- 1) Product Name High Power Top LED
- 2) Type No. SMB760-1100-01
- 3) Chip
 - (1) Chip Material GaAlAs
 - (2) Chip Dimension 1000um*1000um
 - (3) Peak Wavelength 760nm typ.
- 4) Package
 - (1) Lead Frame Die Silver Plated on Copper
 - (2) Package Resin PPA Resin
 - (3) Lens Epoxy Resin



◆Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	1200	mW	T _a =25°C
Forward Current	I _F	600	mA	T _a =25°C
Pulse Forward Current	I _{FP}	2000	mA	T _a =25°C
Reverse Voltage	V _R	10	V	T _a =25°C
Operating Temperature	T _{OPR}	-30 ~ +85	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	265	°C	

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

‡Soldering condition: Soldering condition must be completed within 3 seconds at 265°C

◆Electro-Optical Characteristics [T_a=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =200mA		1.60	1.85	V
Pulsed Forward Voltage	V _F	I _{FP} =2A		3.0	4.0	V
Reverse Current	I _R	V _R =5V			10	uA
Radiated Power	P _O	I _F =200mA	40	70		mW
Radiant Intensity	I _E	I _F =200mA		200		mW/sr
Peak Wavelength	λ _P	I _F =50mA		760		nm
Half Width	Δλ	I _F =50mA		25		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA		±7		deg.
Rise Time	t _r	I _F =50mA		80		ns
Fall Time	t _f	I _F =50mA		80		ns

‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by Tektronix J-6512.

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