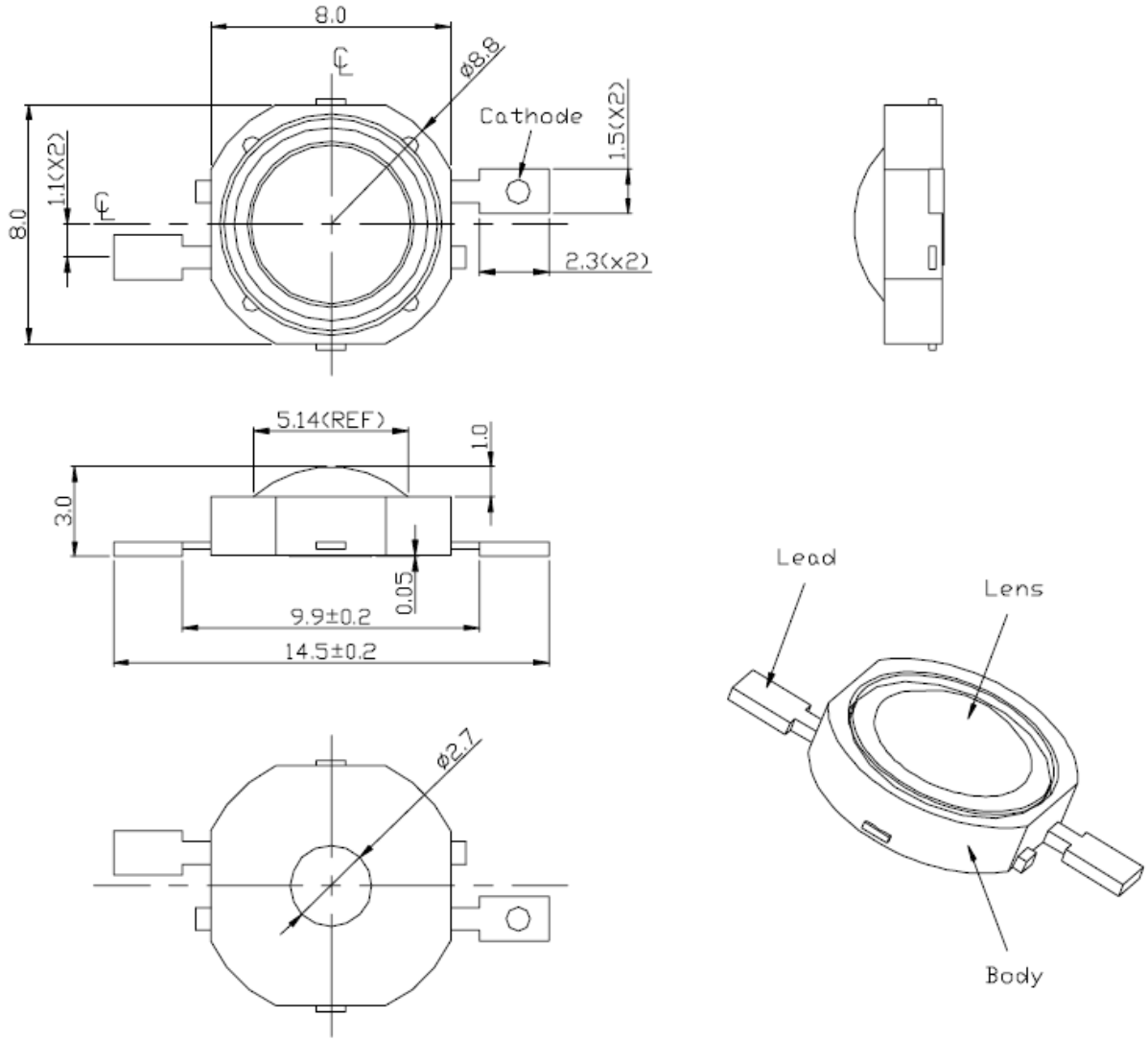
■ Package Dimension:



Part NO.	Housing	Emitting Color	Lens Color
AL-508B5WC	----	Blue	Water Clear

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm (.010”) unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04”) max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.
6. This data-sheet only valid for six months.

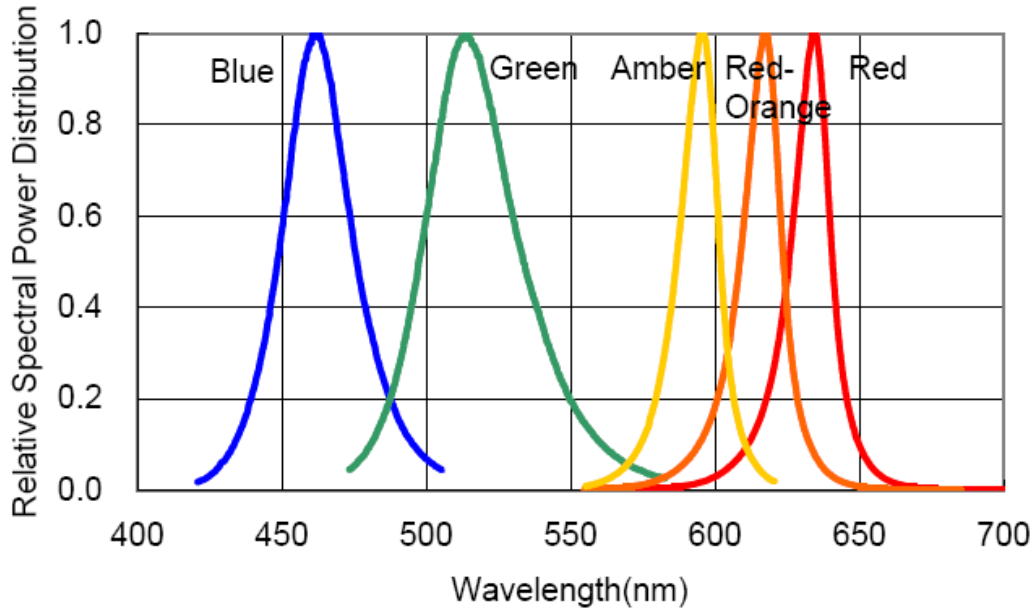
■ Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol	MAX.	Unit
DC Forward Current	I_F	700	mA
Peak pulsed forward current	---	1000	mA
Average forward current	---	700	mA
ESD Sensitivity	---	± 16000	V HBM
LED junction Temperature (at 350mA)	Tj	135	℃
Operating Temperature Range	Topr	-40 to +105	℃
Storage Temperature Range	Tstg	-40 to +105	℃
Aluminum-core PCB Temperature	---	105	℃
Soldering Temperature (Max.)	Tsol	260 ± 5	seconds

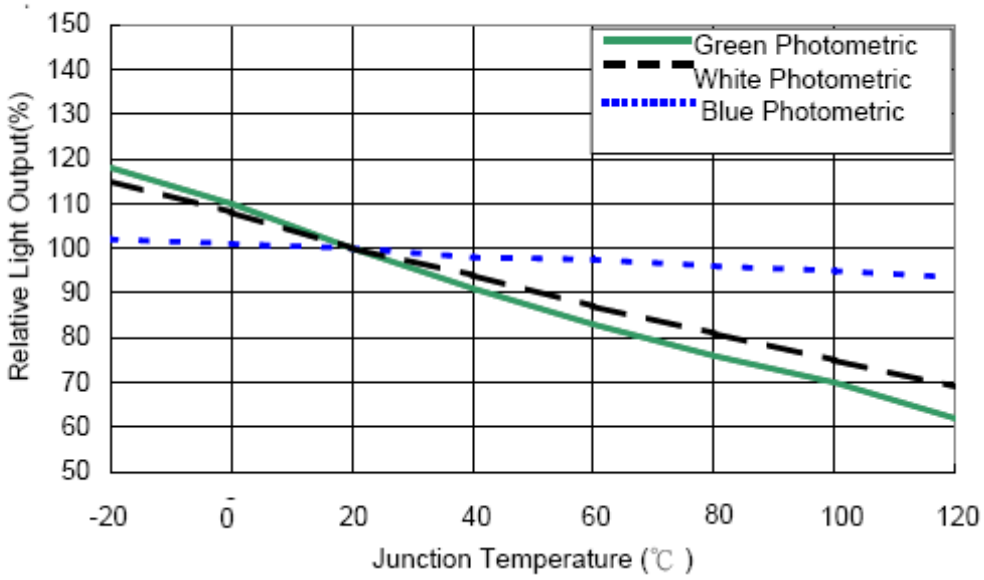
■ Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Flux	Flux	18.1	40	---	Im	I_F=700mA
Forward Voltage	V_F	5.43	7.10	7.98	V	I_F=700mA
Wavelength	λ d	460	470	490	nm	I_F=700mA
Spectral Half-Width	△λ 1/2	---	25	---	nm	I_F=700mA
Temperature Coefficient or Dominant Wavelength	△λ d /△Tj	---	0.04	---	nm/℃	I_F=700mA
Temperature Coefficient of V_F	△V_F /△Tj	---	-4	---	mV/℃	I_F=700mA
Termal Resistance Junction to Board	----	---	8	---	℃/W	I_F=700mA
Dynamic Resistance	----	---	1.0	---	Ω	I_F=700mA
Total Included Angle	θ0.9v	---	160	---	Deg	I_F=700mA
Viewing Angle	2θ1/2	---	140	---	Deg	I_F=700mA

Wavelength Characteristics, Tj=25℃



Light Output Characteristics



Current Derating Curves

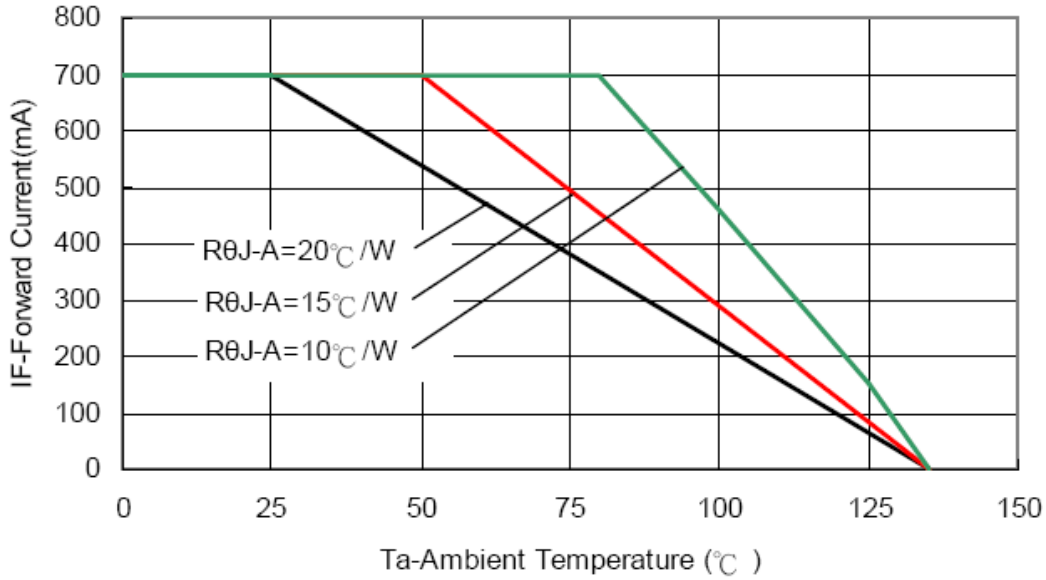
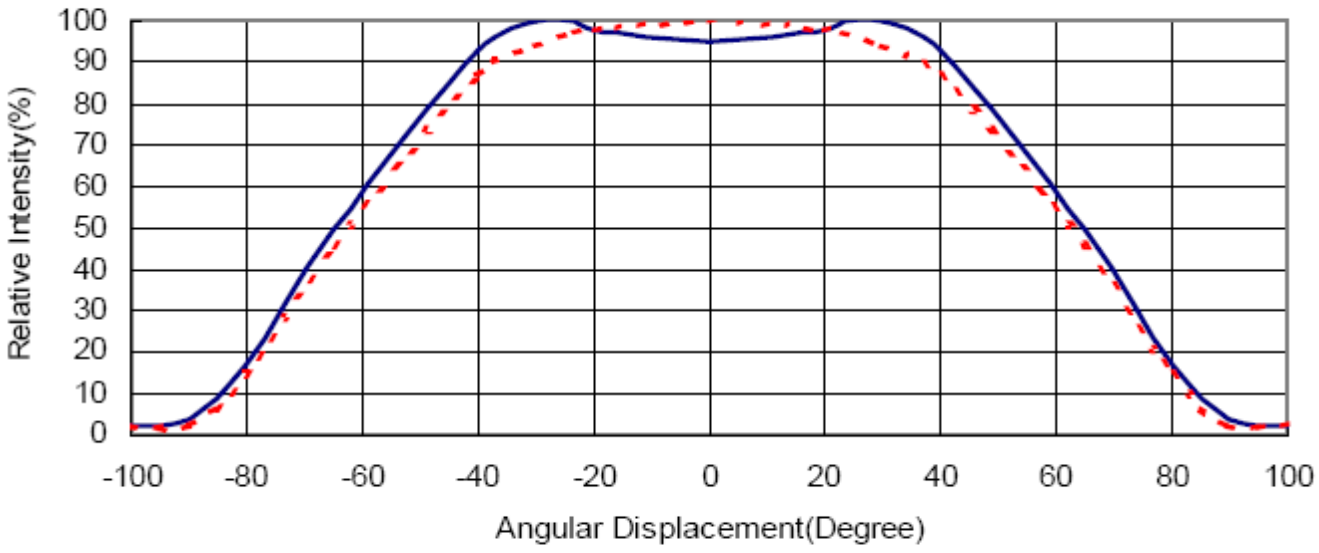


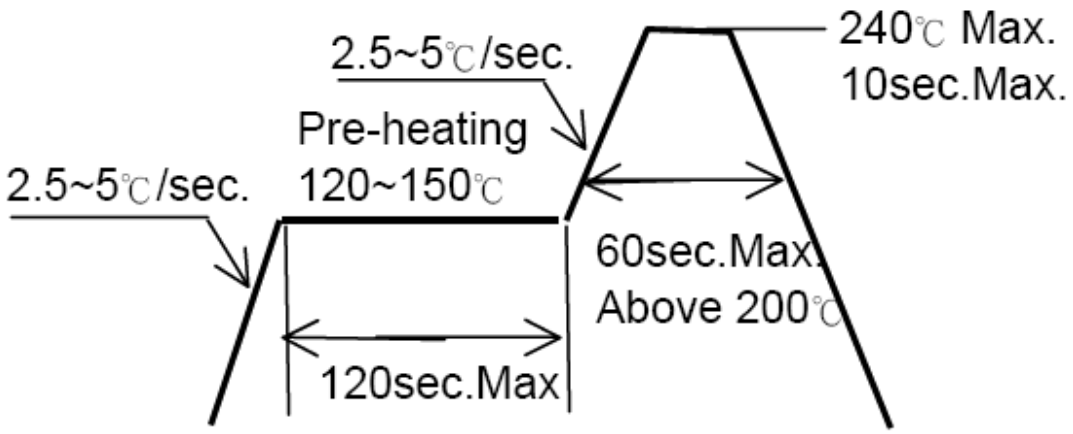
Fig 5a. Maximum Forward Current vs. Ambient Temperature. Derating based on TjMAX=135℃ for White, Warm White, Blue and Green.

Typical Representative Spatial Radiation Pattern

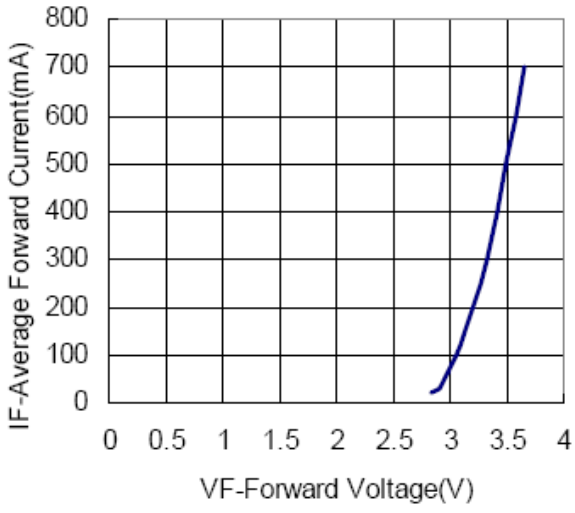
Lambertian Radiation Pattern

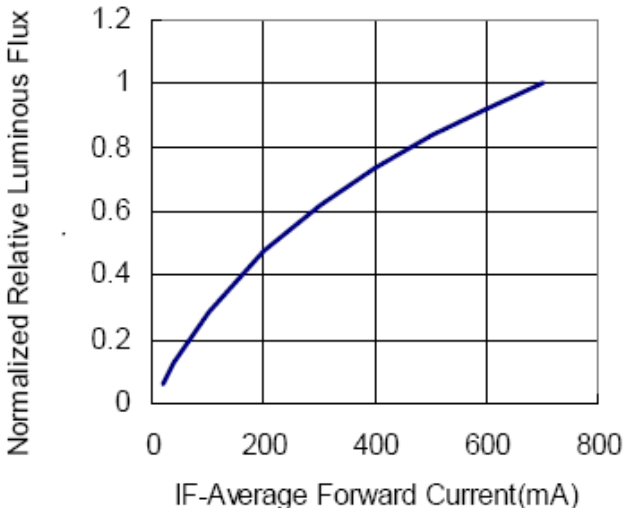


Temperature-profile (Surface of MCPCB)

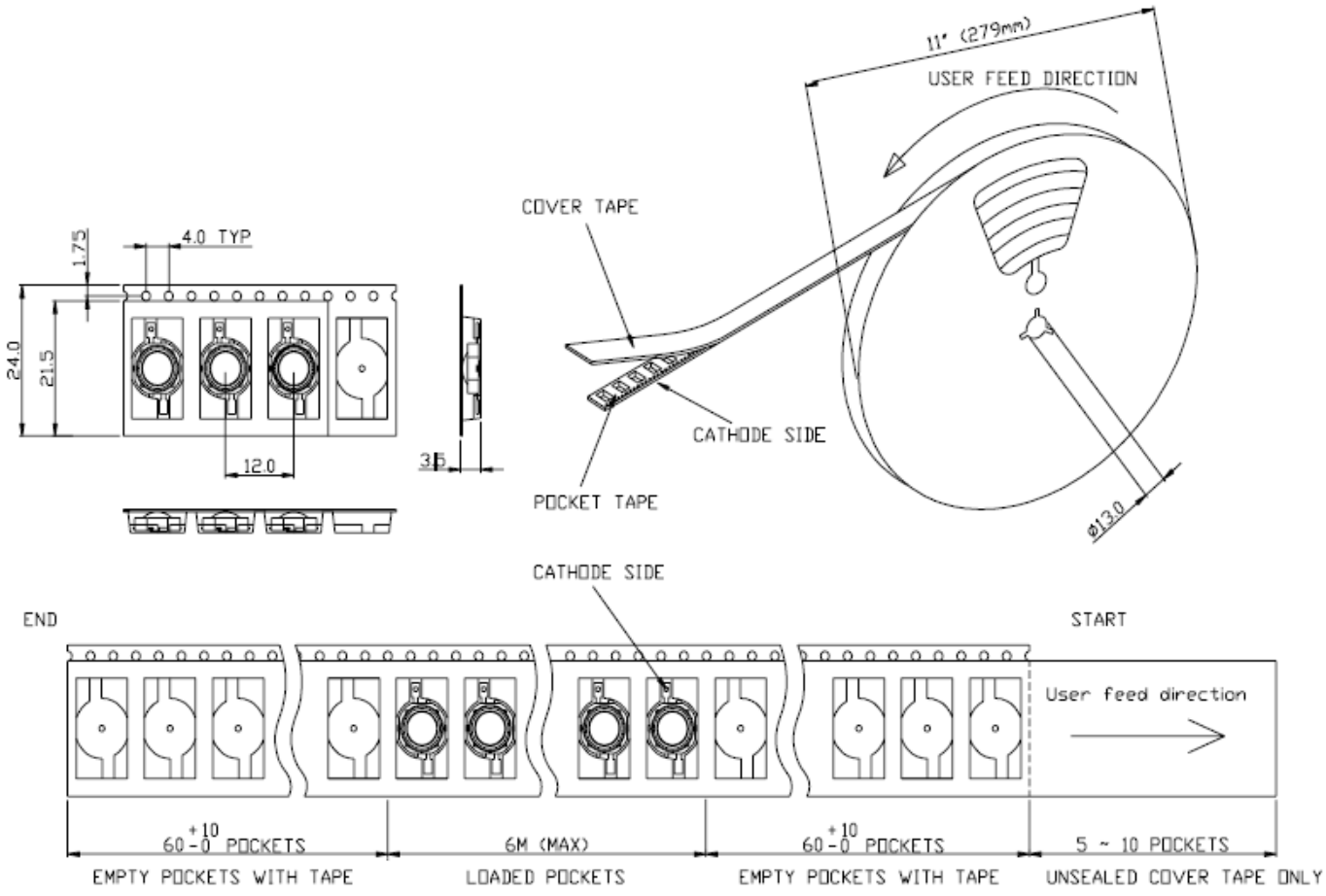


Forward Current Characteristics, Tj=25℃





Emitter Reel Packaging



Notes:

1. The emitters should be picked up by the body (not the lens) during placement. The inner diameter of the pick-up collet should be greater than or equal to 6.5 mm.
2. Drawing not to scale.
3. All dimensions are in millimeters.
4 .All dimendions without tolerances are for reference only.