

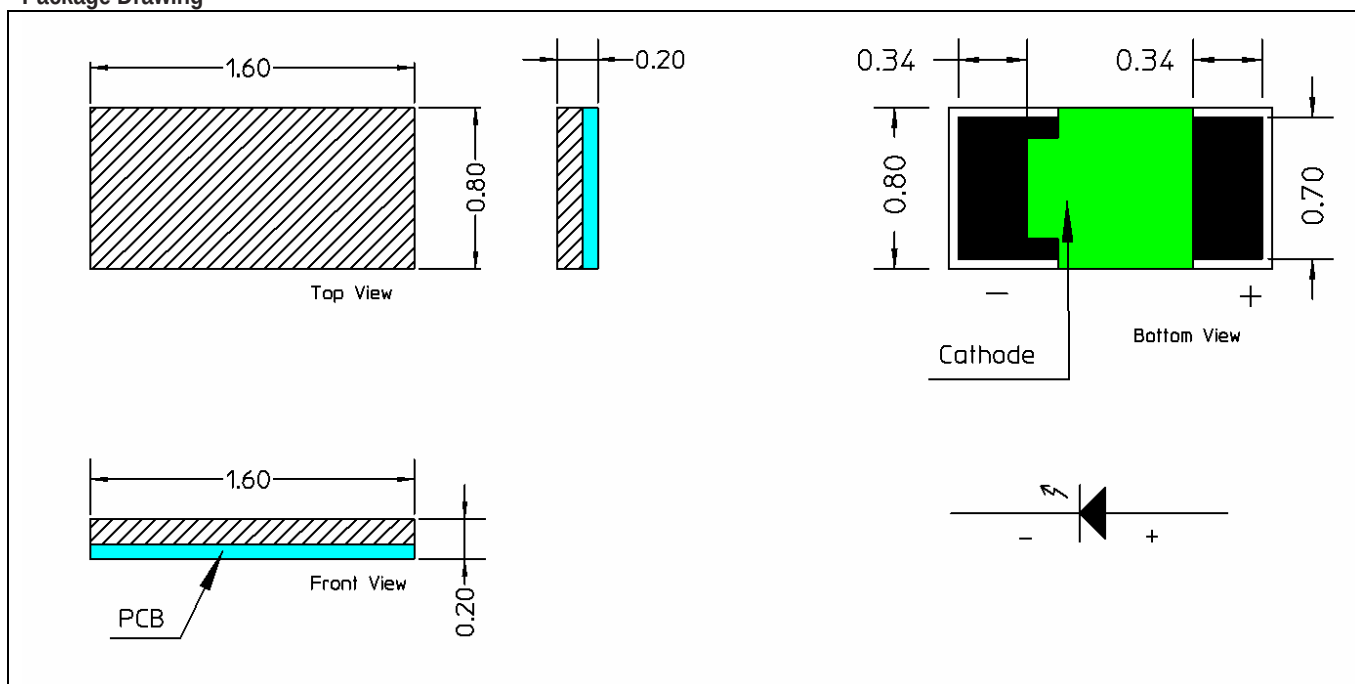
ASMT-CB20

SMT Top Fire ChipLED

Data Sheet



Package Drawing



- All dimensions in millimeters.
- Tolerance is ± 0.1 mm unless otherwise specified.
- Electrode Ag plated.

Device Selection Guide

Part Number	Color	Chip
ASMT-CB20	Blue	InGaN

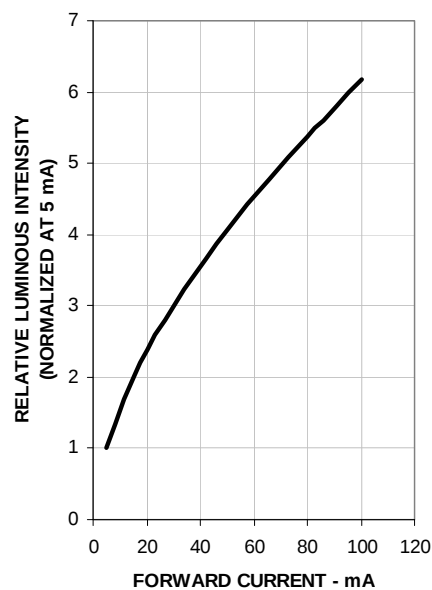
CAUTION: Class 1B static sensitive device per JESD22A114. Please observe appropriate precautions during handling and processing.

Absolute Maximum Ratings at T_A = 25°C

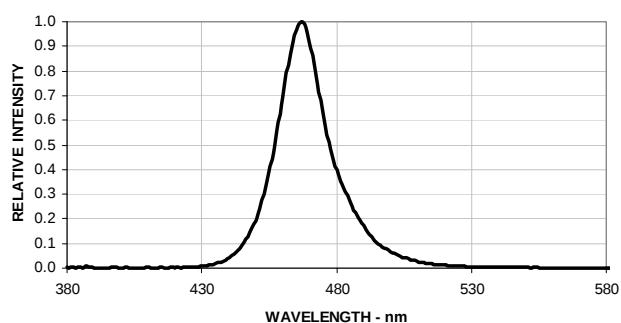
Parameter	Rating	Unit
DC Forward Current	10	mA
Power Dissipation	32	mW
Operating Temperature	-40 to +85	°C
Storage Temperature	-40 to +85	°C
Moisture Sensitivity Level (IPC/JEDEC JSTD020)	2A	-

Optical-Electrical Characteristics at T_A = 25°C

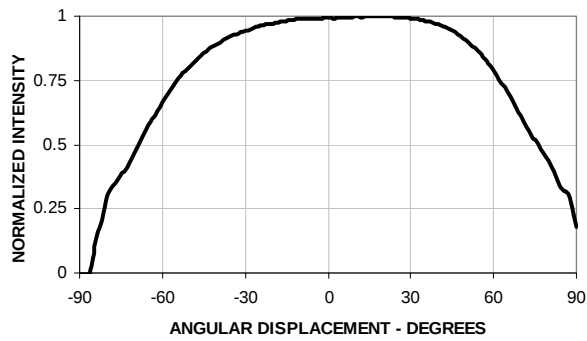
Parameter	Test condition	Rating			Unit
		Min	Typ	Max	
Luminous intensity (I _v)	I _F =5mA	11.2	25.0	71.5	mcd
Viewing Angle (2θ _{1/2})	I _F =5mA		130		deg.
Peak wavelength (λ _p)	I _F =5mA		468		nm
Dominant wavelength (λ _d)	I _F =5mA	465		475	nm
Forward voltage (V _F)	I _F =5mA	2.55		3.15	V



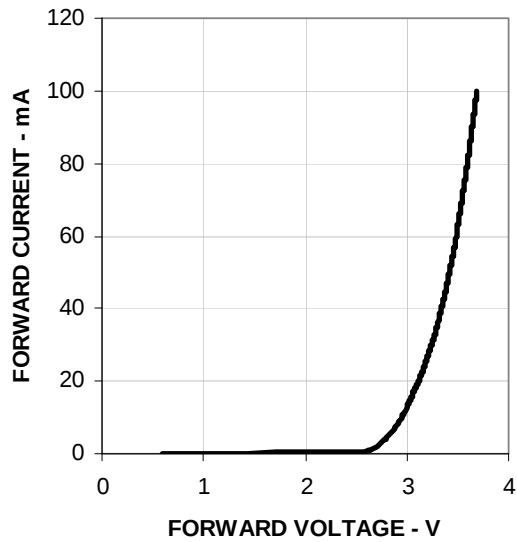
Relative Luminous Intensity vs. Forward Current



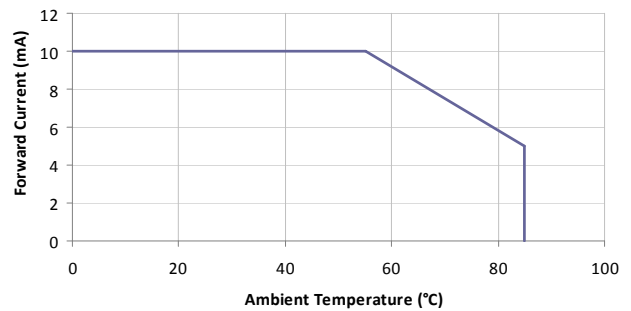
Relative Intensity vs. Wavelength



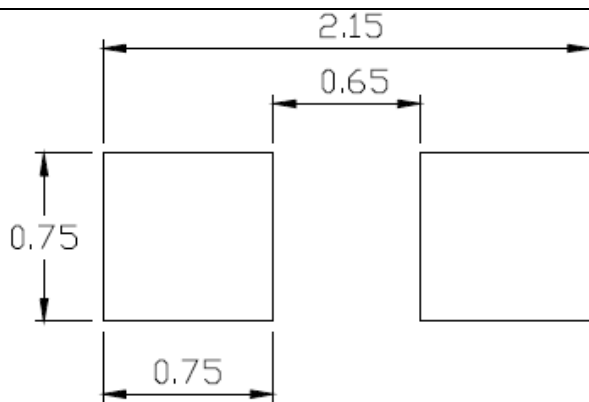
Radiation Pattern



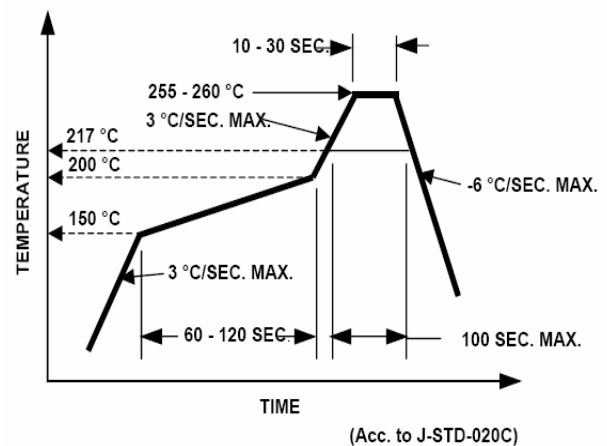
Forward Current vs. Forward Voltage



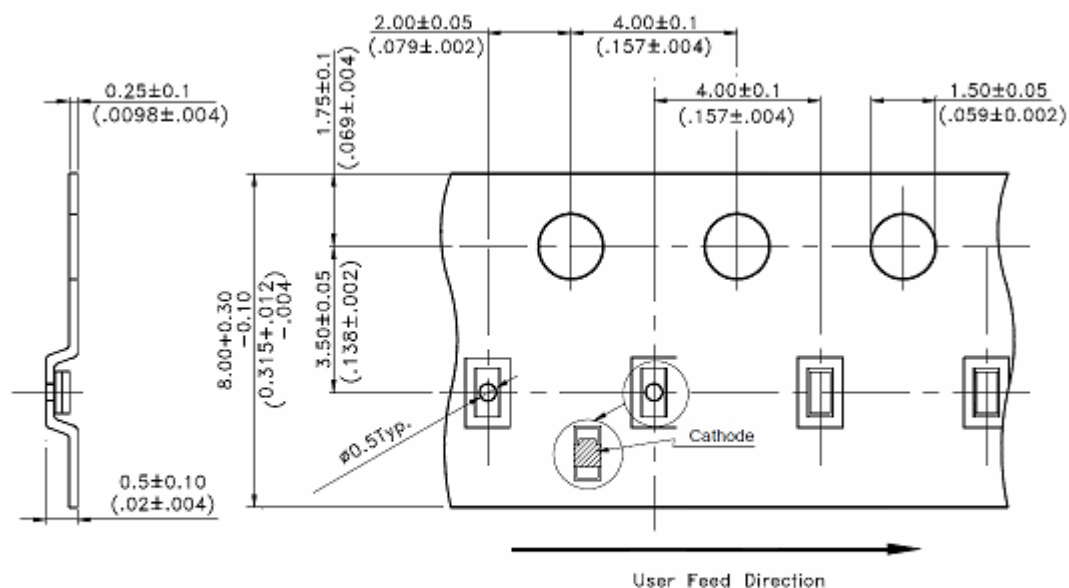
Forward Current vs. Ambient Temperature



Recommended Soldering Land Pattern



Recommended Pb-Free Reflow Soldering Profile



Tape Dimensions

Luminous Intensity Bin

Bin	Min (mcd)	Max (mcd)
L	11.2	18.0
M	18.0	28.5
N	28.5	45.0
P	45.0	71.5

Tolerance $\pm 15\%$

Color Bin

Bin	Min (nm)	Max (nm)
B	465	470
C	470	475

Tolerance $\pm 1\text{nm}$

Forward Voltage Bin

Bin	Min (V)	Max (V)
1	2.55	2.75
2	2.75	2.95
3	2.95	3.15

Tolerance $\pm 0.1\text{V}$