3.5X3.5mm SURFACE MOUNT SMD CHIP LED

Features

 \bullet Ideal for indication light on hand held products

• Long life and robust package

• Variety of lens types and color choices available

 \bullet Package: 2000pcs / reel

• Moisture sensitivity level : level 3

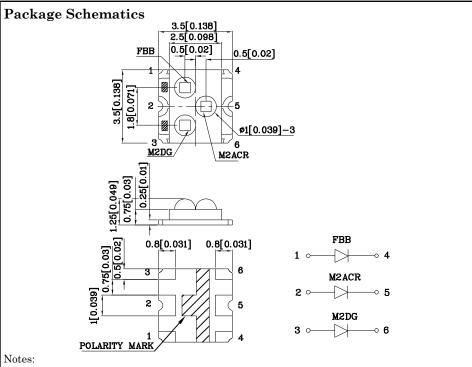
• RoHS compliant







ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings $(T_A=25^{\circ}C)$		FBB (InGa N)	M2ACR (AlGaIn P)	M2DG (InGa N)	Unit
Reverse Voltage	$V_{\rm R}$	5	5	5	V
Forward Current	I_{F}	30	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	100	150	100	mA
Power Dissipation	P_{D}	120	84	120	mW
Electrostatic Discharge Threshold (HBM)		250	250 -		V
Operating Temperature	T_{A}	-40 ~ +85			°C
Storage Temperature	Tstg				

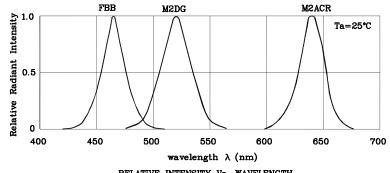
Operating Characteristics (T _A =25°C)		FBB (InGaN)	M2ACR (AlGaInP)	M2DG (InGaN)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	3.3 2.2		3.2	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	4	2.8	4	V
Reverse Current (Max.) (V _R =5V)	I_{R}	50	10	50	uA
Wavelength of Peak Emission (Typ.) (I _F =20mA)	λΡ	465	640	520	nm
Wavelength of Dominant Emission (Typ.) (I _F =20mA)	λD	470	625	525	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	22	25	35	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	100	27	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
	Blue	InGaN		380	795	465	45°
XZFBBM2ACRDG92W-3	Red	AlGaInP	- Water Clear	2800	4990	640	60°
	Green	InGaN	· 	1500	2190	520	40°

Jun 27,2011 XDSB6145 V1 Layout: Maggie L.

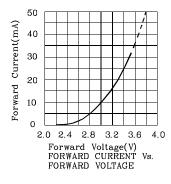


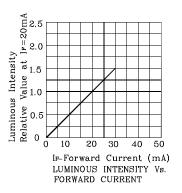


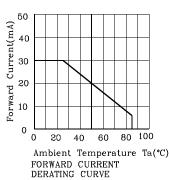


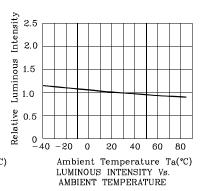
RELATIVE INTENSITY Vs. WAVELENGTH

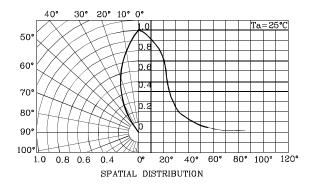
♦ FBB





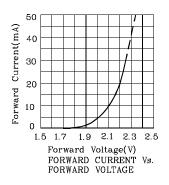


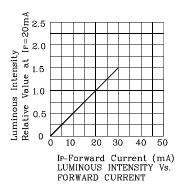


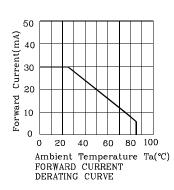


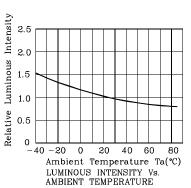


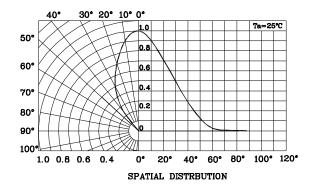




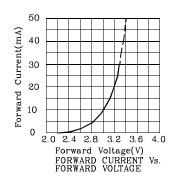


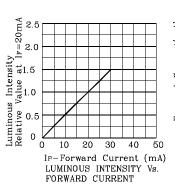


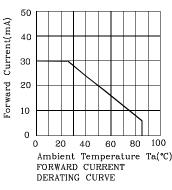


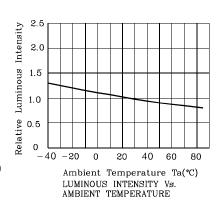


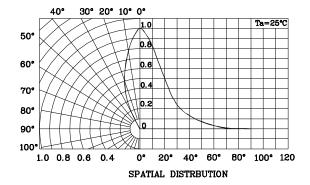
❖ M2DG











Jun 27,2011

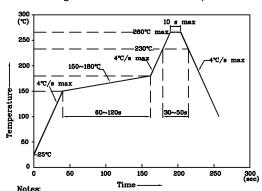
XDSB6145 V1 Layout: Maggie L.





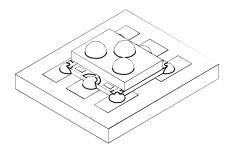
LED is recommended for reflow soldering and soldering profile is shown below.

Reflow Soldering Profile for SMD Products (Pb-Free Components)

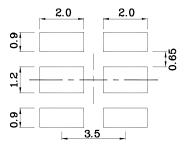


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- Do not put stress to the epoxy resin during high temperatures conditions

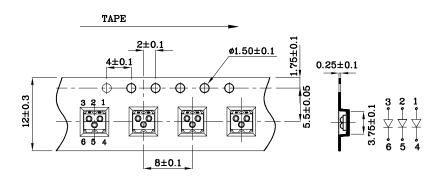
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



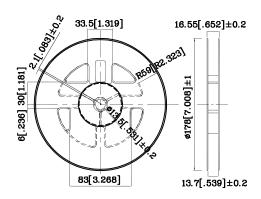
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ Tape Specification (Units:mm)



❖ Reel Dimension



Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS

www.SunLEDusa.com

