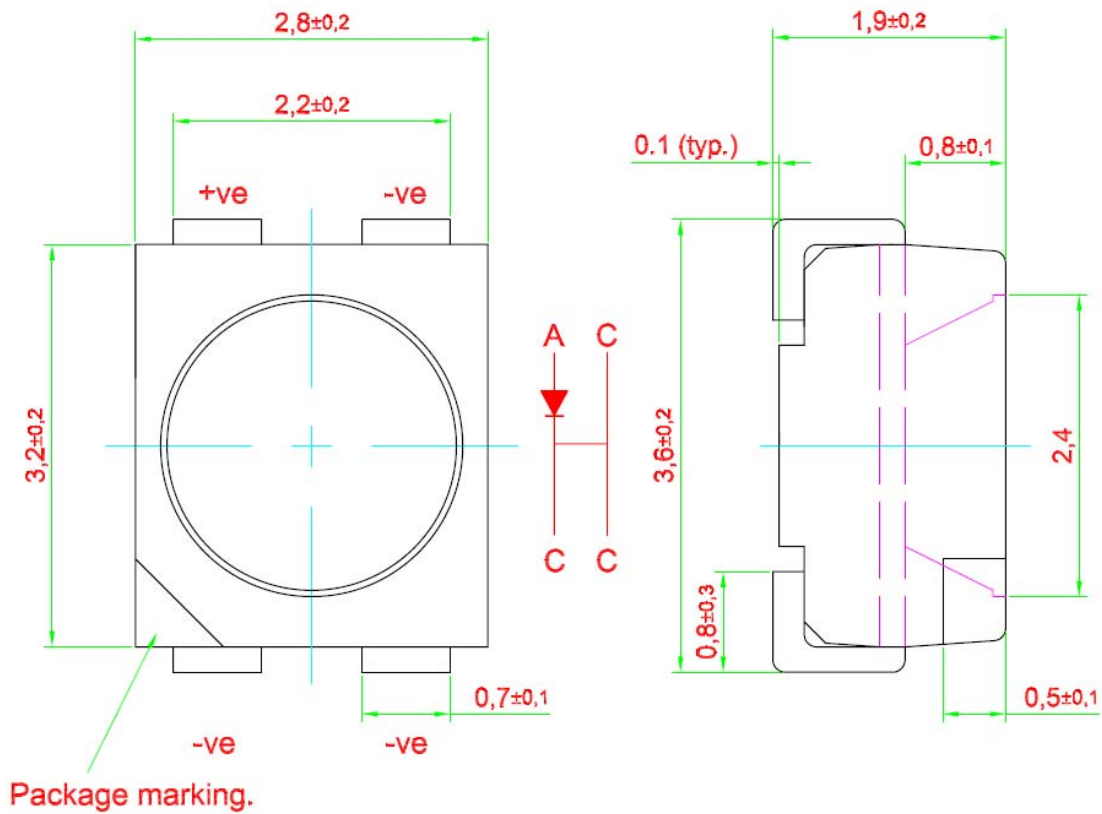


Engineering reference data are not verified. The specifications are subject to change without notice.

**Power DomiLED – PKG AlInGaP**



- High brightness surface mount LED using thin film technology.
- 120° viewing angle.
- Small package outline (LxWxH) of 3.6 x 2.8 x 1.9 mm.
- Qualified according to JEDEC moisture sensitivity Level 2.
- Compatible to both IR reflow soldering and TTW soldering.
- Superior corrosion resistant.



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**Optical Characteristics at Tj=25°C.**

Part Ordering Number	Chip Technology / Color	Viewing angle	Luminous Intensity @ If = 50mA Iv ( mcd )
<b>DWR-PKG-X2Y1-1</b> <ul style="list-style-type: none"> <li>DWR-PKG-X2</li> <li>DWR-PKG-Y1</li> </ul>	AllInGaP / Red, 620 nm	120	<b>2240.0 ... 3550.0</b> 2240.0 ... 2850.0 2850.0 ... 3550.0
<b>DWA-PKG-X2Y-1</b> <ul style="list-style-type: none"> <li>DWA-PKG-X2</li> <li>DWA-PKG-Y1</li> <li>DWA-PKG-Y2</li> </ul>	AllInGaP / Amber, 617 nm		<b>2240.0 ... 4500.0</b> 2240.0 ... 2850.0 2850.0 ... 3550.0 3550.0 ... 4500.0
<b>DWY-PKG-X2Y-1</b> <ul style="list-style-type: none"> <li>DWY-PKG-X2</li> <li>DWY-PKG-Y1</li> <li>DWY-PKG-Y2</li> </ul>	AllInGaP / Yellow, 589 nm		<b>2240.0 ... 4500.0</b> 2240.0 ... 2850.0 2850.0 ... 3550.0 3550.0 ... 4500.0

NOTE:

1. All part number above comes in a quantity of 2000 units per reel.
2. Luminous intensity is measured with an accuracy of ±11%.
3. Wavelength binning is carried for all units as per the wavelength-binning table. Only one wavelength group is allowed for each reel.
4. An optional Vf binning is also available upon request. Binning scheme is as per following table.

**Electrical Characteristics at Tj=25°C.**

Part Number	Vf @ If = 50mA			Vr @ Ir = 10uA
	Min. (V)	Typ. (V)	Max. (V)	Min.(V)
DWX-PKG	1.9	2.2	2.65	12

Forward voltage, Vf is measured with an accuracy of ±0.1 V.

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**Vf Binning (Optional)**

Vf Bin @ 50mA	Forward voltage (V)
5O	1.90 ... 2.05
5A	2.05 ... 2.20
5B	2.20 ... 2.35
5C	2.35 ... 2.50
5D	2.50 ... 2.65

Forward voltage, Vf is measured with an accuracy of ±0.1 V.

**Wavelength Grouping.**

Color	Group	Wavelength distribution (nm)
DWR; Red	Full	620 – 630
DWA, Amber	Full	610 – 621
	W	610 - 615
	X	615 - 621
DWY; Yellow	Full	585 – 594
	X	585 – 588
	Y	588 - 591
	Z	591 - 594

Dominant wavelength is measured with an accuracy of ±1 nm at a drive current of 50 mA.

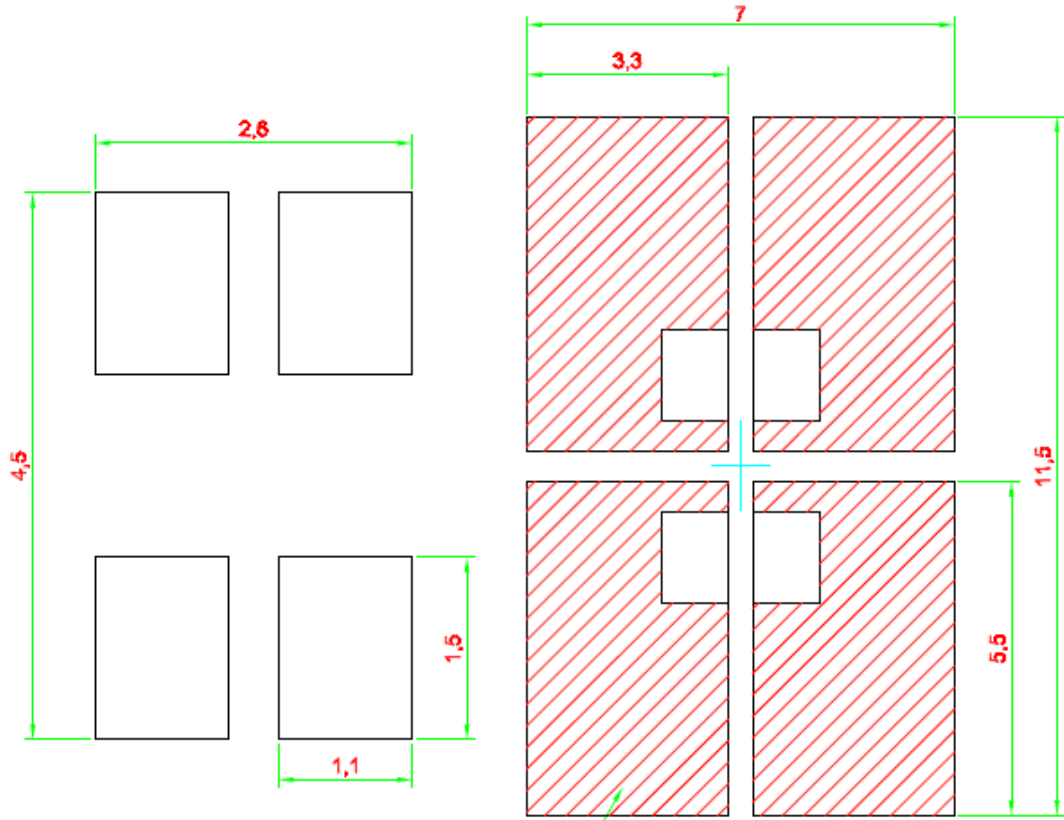
Engineering reference data are not verified. The specifications are subject to change without notice.

**Absolute Maximum Ratings.**

	Maximum Value	Unit
DC forward current.	70	mA
Peak pulse current; ( $t_p \leq 10 \mu\text{s}$ , Duty cycle = 0.1)	100	mA
Reverse voltage.	12	V
ESD Threshold (HBM)	2000	V
LED junction temperature.	125	°C
Operating temperature.	-40 ... +100	°C
Storage temperature.	-40 ... +100	°C
Power dissipation ( at room temperature )	200	mW

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**Recommended Solder Pad**



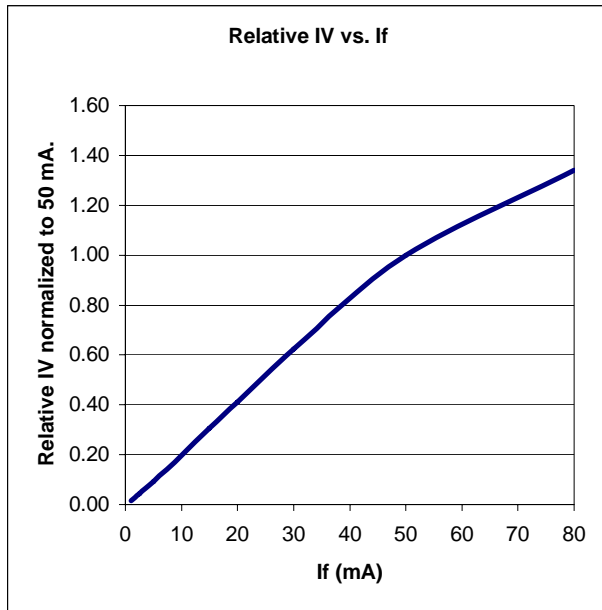
 Solder mask.

Additional Cu area for improved heat dissipation.  
Cu area >16 mm sqr per pad .  
Electrically isolated with solder mask.

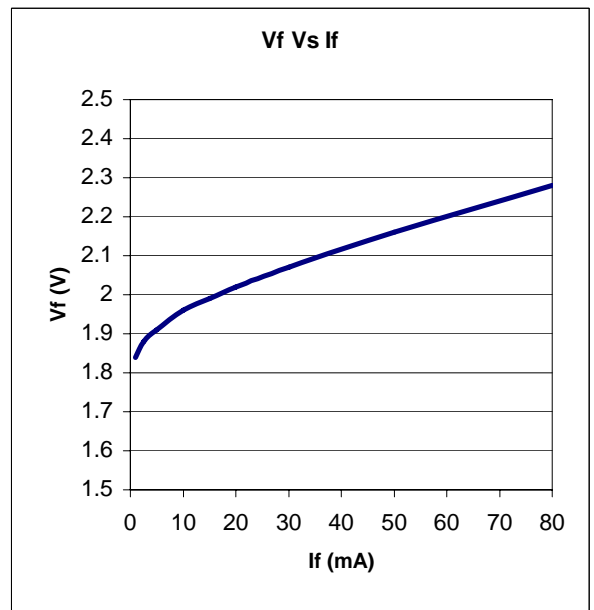
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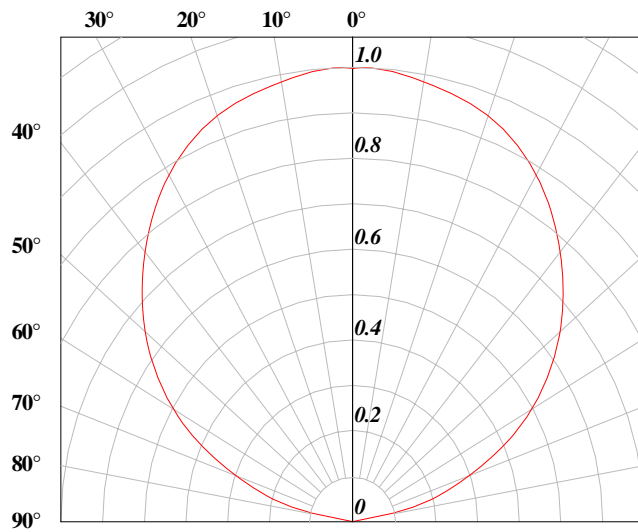
**Relative luminous intensity vs. forward current.**



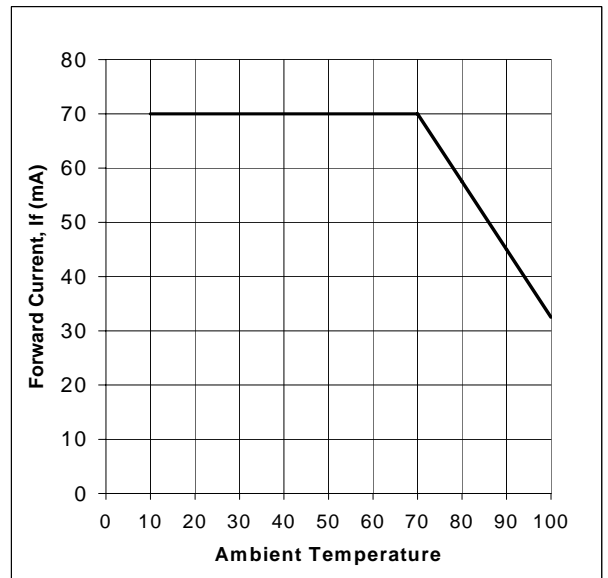
**Forward current vs. forward voltage.**



**Radiation pattern.**



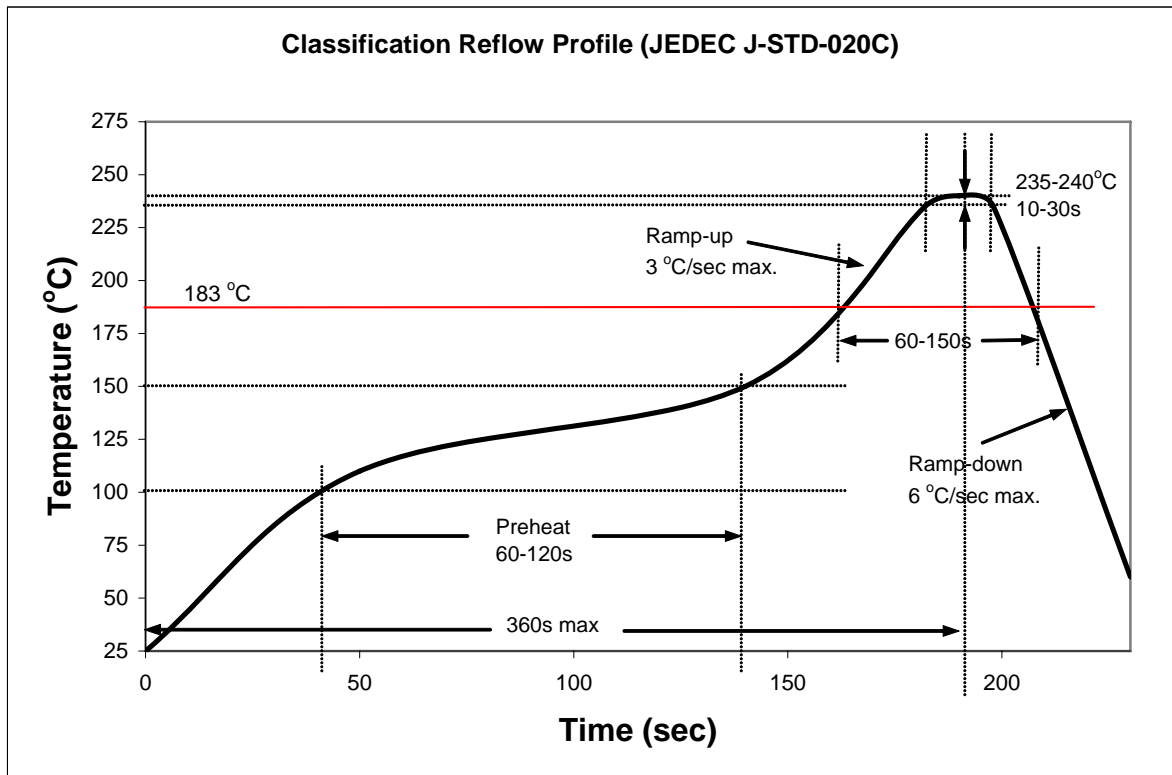
**Maximum forward current vs. temperature.**



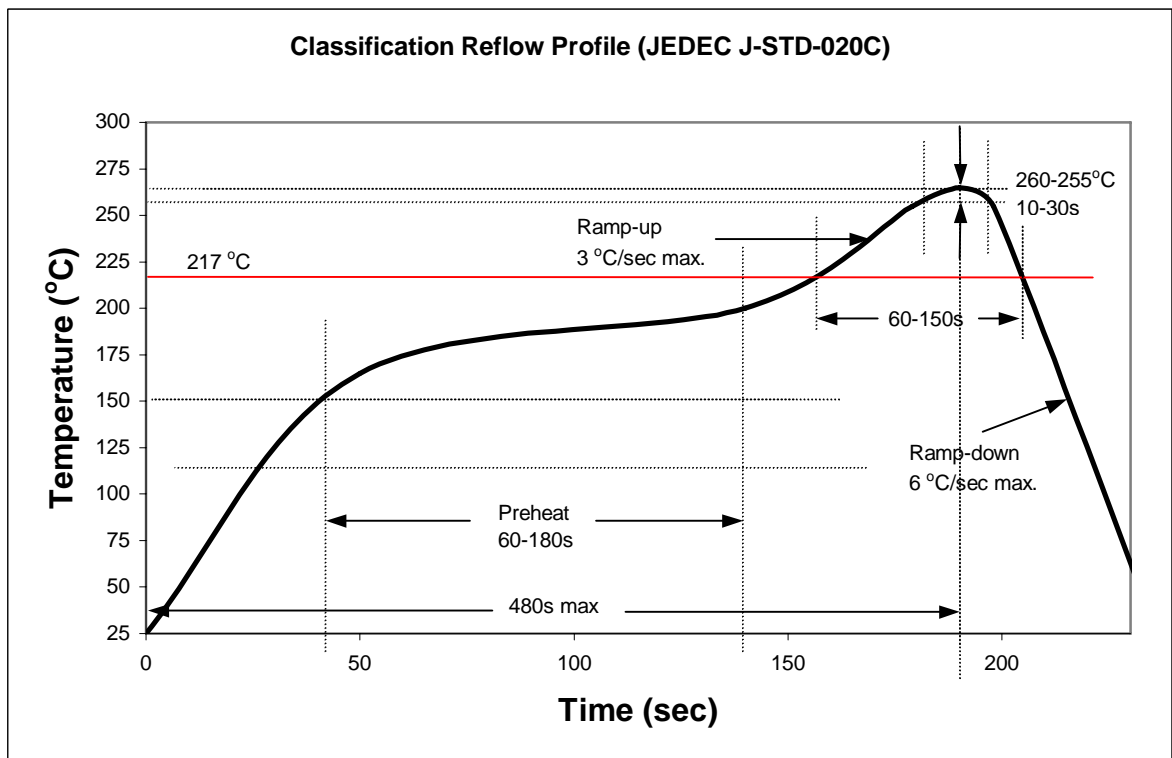


Engineering reference data are not verified. The specifications are subject to change without notice.

**Recommended Sn-Pb IR-Reflow Soldering Profile.**



**Recommended Pb Free IR-Reflow Soldering Profile.**



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**NOTE.**

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