

Domiled™

Synonymous with function and performance, the Domiled™ series is perfectly suited for a variety of cross-industrial applications due to its small package outline, durability and superior brightness.



Features:

- > High brightness surface mount LED.
- > 120° viewing angle.
- > Small package outline (LxWxH) of 3.2 x 2.8 x 1.8mm.
- > Qualified according to JEDEC moisture sensitivity Level 2.
- > Compatible to both IR reflow soldering and TTW soldering.
- > Environmental friendly; RoHS compliance.



Applications:

- > Automotive: interior applications, eg: switches, telematics, climate control system, dashboard, etc.
- > Consumer Appliances: LCD illumination as in PDAs, LCD TV.
- > Communication: indicator and backlight in mobilephone.
- > Display: full color display video notice board.
- > Industry: white goods (eg: Oven, microwave, etc.).



Part Ordering Number	Chip Technology / Color	Viewing Angle°	Luminous Intensity @ IF = 20mA IV (mcd)
DDR-GJS-LM2-1	Gap	120	11.2 - 28.5
• DDR-GJS-L1	Red, 625nm		11.2 - 14.0
• DDR-GJS-L2			14.0 - 18.0
• DDR-GJS-M1			18.0 - 22.4
• DDR-GJS-M2			22.4 - 28.5
DDR-GJS-MN2-1			18.0 - 45.0
• DDR-GJS-M1			18.0 - 22.4
• DDR-GJS-M2			22.4 - 28.5
• DDR-GJS-N1			28.5 - 35.5
• DDR-GJS-N2			35.5 - 45.0
DDO-GJS-LM2-1	Gap	120	11.2 - 28.5
• DDO-GJS-L1	Orange, 605nm		11.2 - 14.0
• DDO-GJS-L2			14.0 - 18.0
• DDO-GJS-M1			18.0 - 22.4
• DDO-GJS-M2			22.4 - 28.5
DDY-GJS-LM2-1	Gap	120	11.2 - 28.5
• DDY-GJS-L1	Yellow, 587nm		11.2 - 14.0
• DDY-GJS-L2			14.0 - 18.0
• DDY-GJS-M1			18.0 - 22.4
• DDY-GJS-M2			22.4 - 28.5
DDG-GJS-LM2-1	Gap	120	11.2 - 28.5
• DDG-GJS-L1	Green, 570nm		11.2 - 14.0
• DDG-GJS-L2			14.0 - 18.0
• DDG-GJS-M1			18.0 - 22.4
• DDG-GJS-M2			22.4 - 28.5
DDG-GJS-MN2-1			18.0 - 45.0
• DDG-GJS-M1			18.0 - 22.4
• DDG-GJS-M2			22.4 - 28.5
• DDG-GJS-N1			28.5 - 35.5
• DDG-GJS-N2			35.5 - 45.0

NOTE

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

Wavelength Grouping

Color	Group	Wavelength distribution (nm)
DDR; Red	Full	620 - 630
DDO; Orange	Full	600 - 612
	W	500 - 603
	X	603 - 606
	Y	606 - 609
	Z	609 - 612
DDY; Yellow	Full	582 - 594
	W	582 - 585
	X	585 - 588
	Y	588 - 591
	Z	591 - 594
DDG; Green	Full	564.5 - 576.5
	W	564.5 - 567.5
	X	567.5 - 570.5
	Y	570.5 - 573.5
	Z	573.5 - 576.5

Dominant wavelength is measured with an accuracy of ± 1 nm.

Electrical Characteristics at Ta=25°C

Chip Type	Vf @ If = 20mA		Vr @ Ir = 10μA
	Typ. (V)	Max. (V)	Min(V)
GaP	2.2	2.6	5

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

Vf Binning (Optional)

Vf Bin @ 20mA	Forward Voltage (V)
01	1.55 ... 1.85
02	1.85 ... 2.15
03	2.15 ... 2.45
04	2.45 ... 2.75

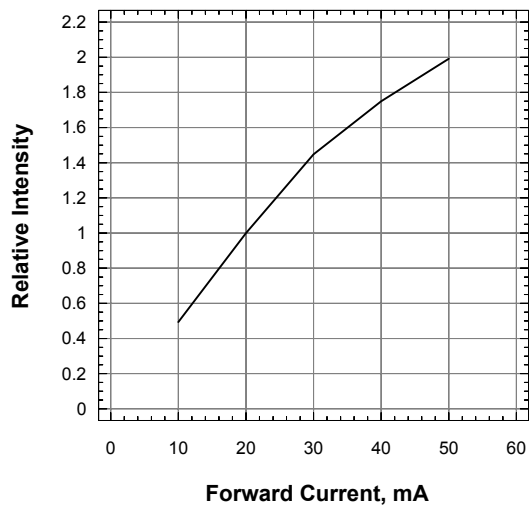
Forward voltage, Vf is measured with an accuracy of ± 0.1 V.

Please consult sales and marketing for special part number to incorporate Vf binning.

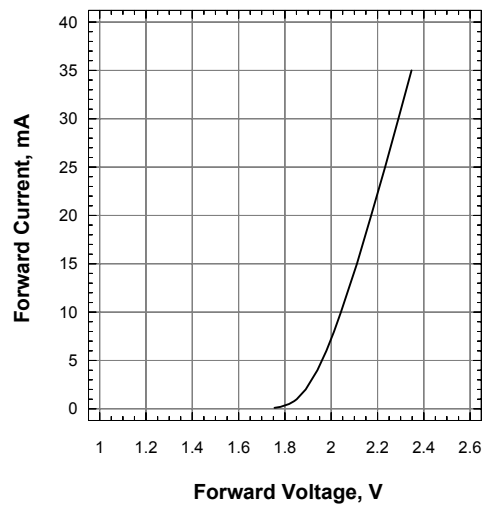
Absolute Maximum Ratings

	Maximum Value	Unit
DC forward current	30	mA
Peak pulse current; (tp ≤ 10μs, Duty cycle = 0.005)	500	mA
Reverse voltage	5	V
ESD Threshold (HBM)	2	kV
LED junction temperature	100	°C
Operating temperature	-40 ... +100	°C
Storage temperature	-40 ... +100	°C
Power dissipation (at room temperature)	75	mW

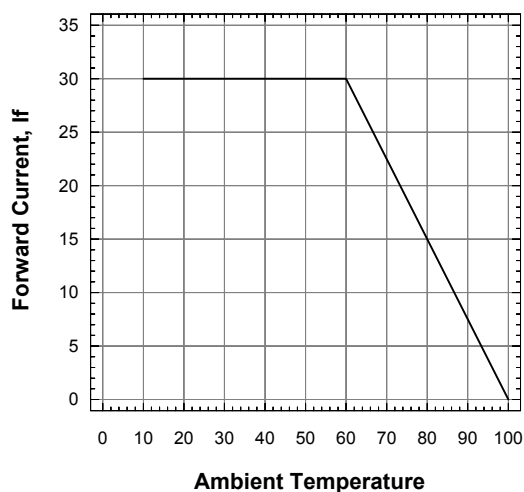
Relative Intensity Vs Forward Current



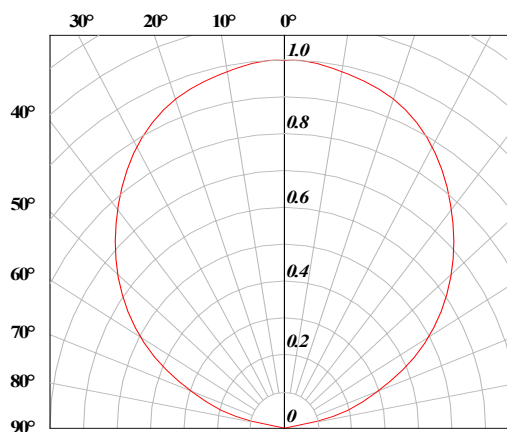
Forward Current Vs Forward Voltage



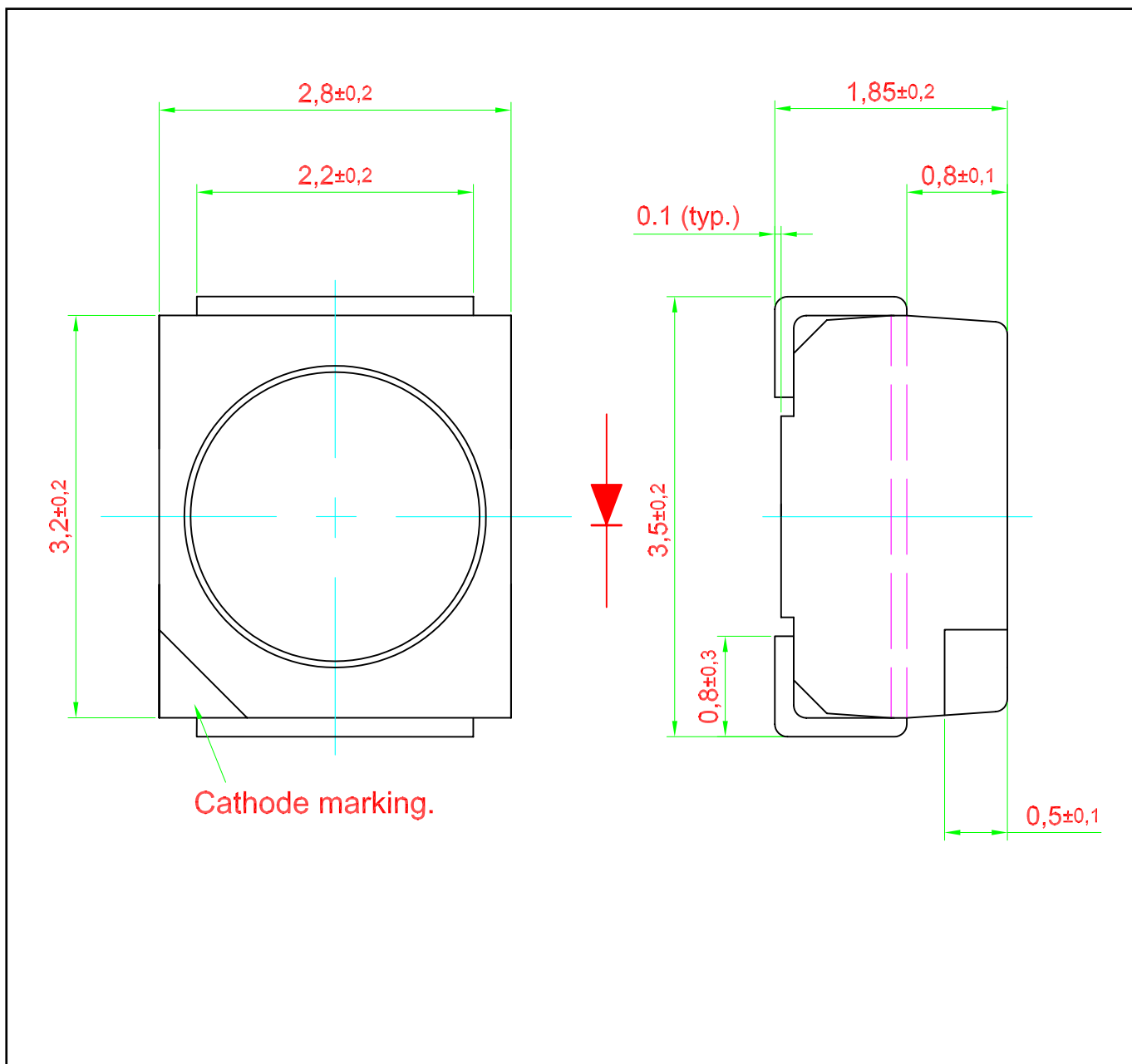
Maximum Forward Current Vs Temperature



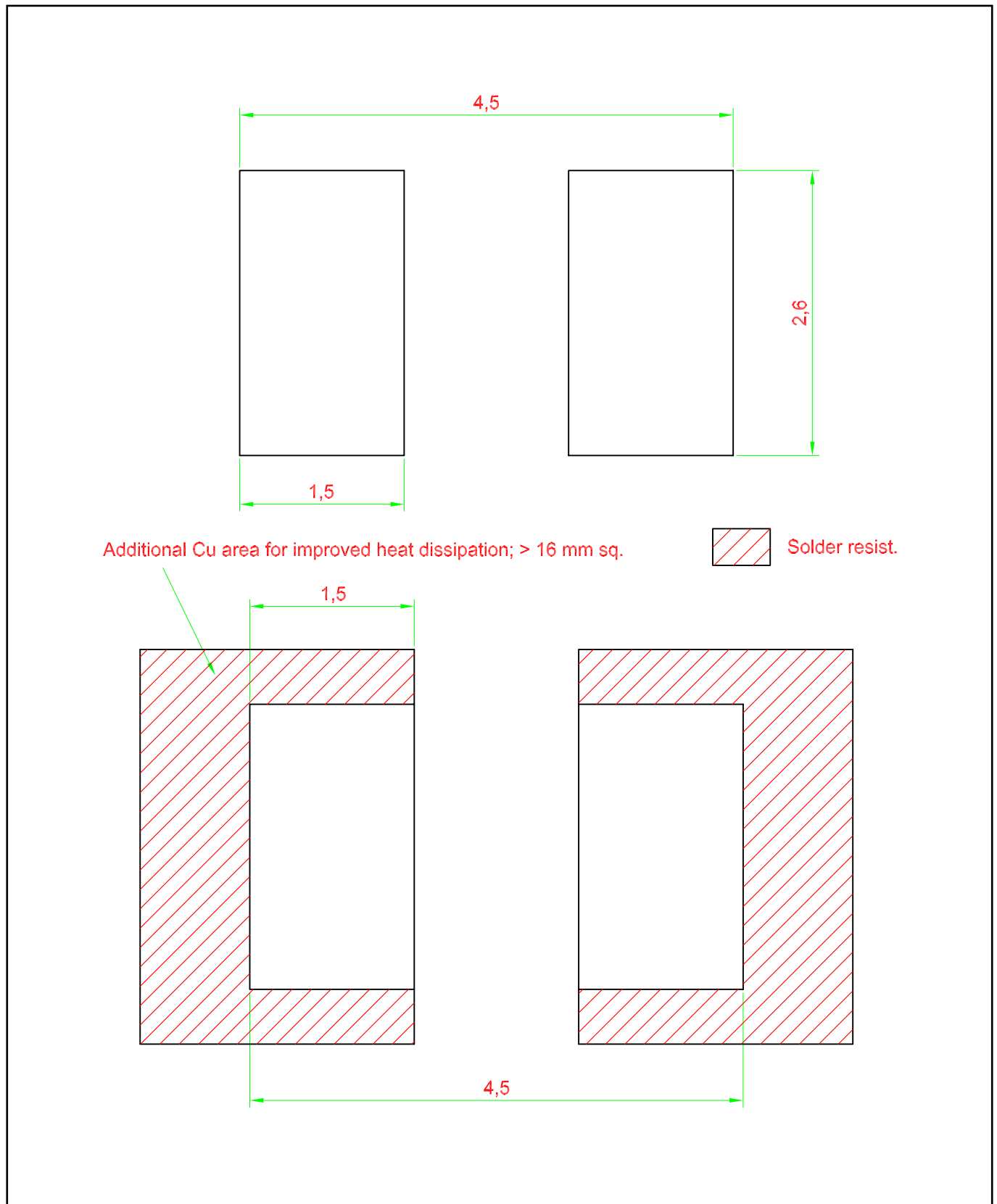
Radiation Pattern



DomiLED™ • Gap : DDx-GJS Package Outlines

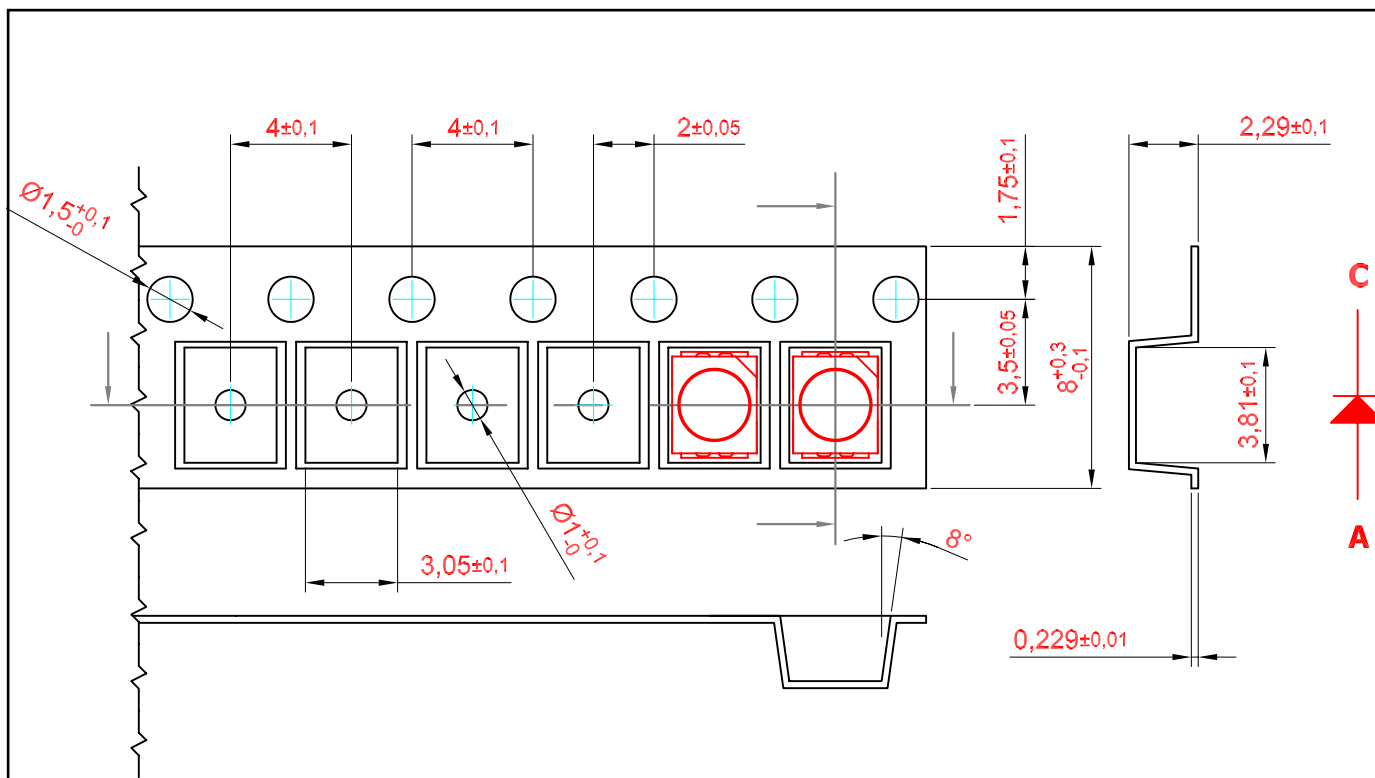


Recommended Solder Pad



Taping and orientation

- Reels come in quantity of 2000 units.
- Reel diameter is 180 mm.

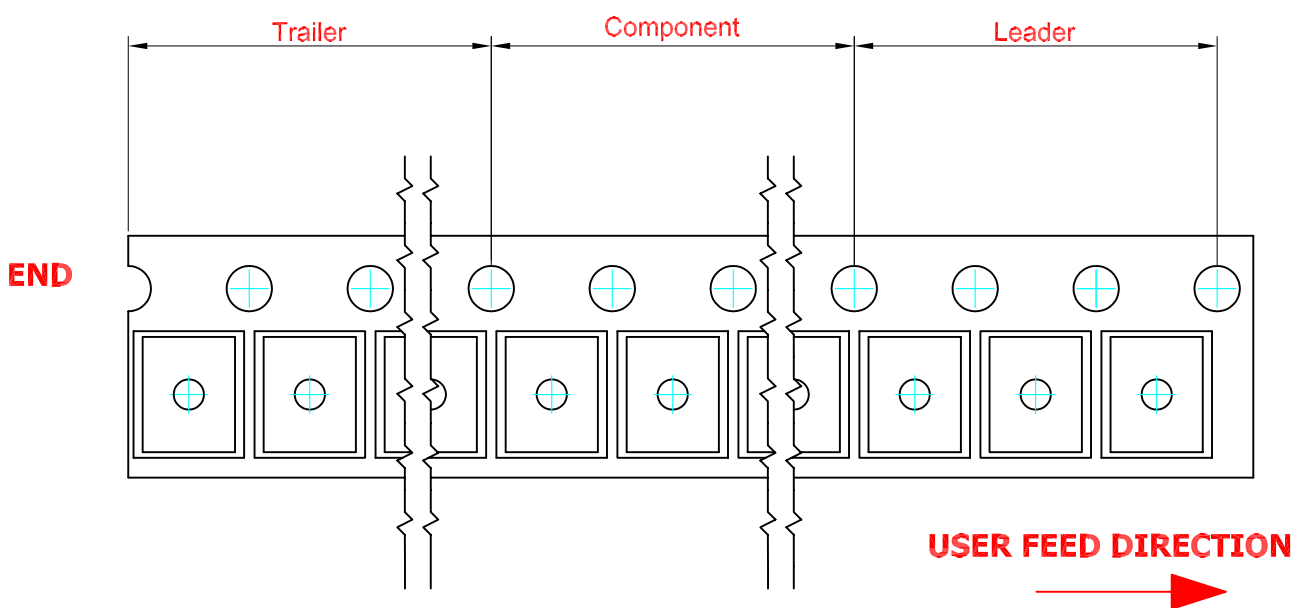


200 mm min. for $\varnothing 180$ reel.

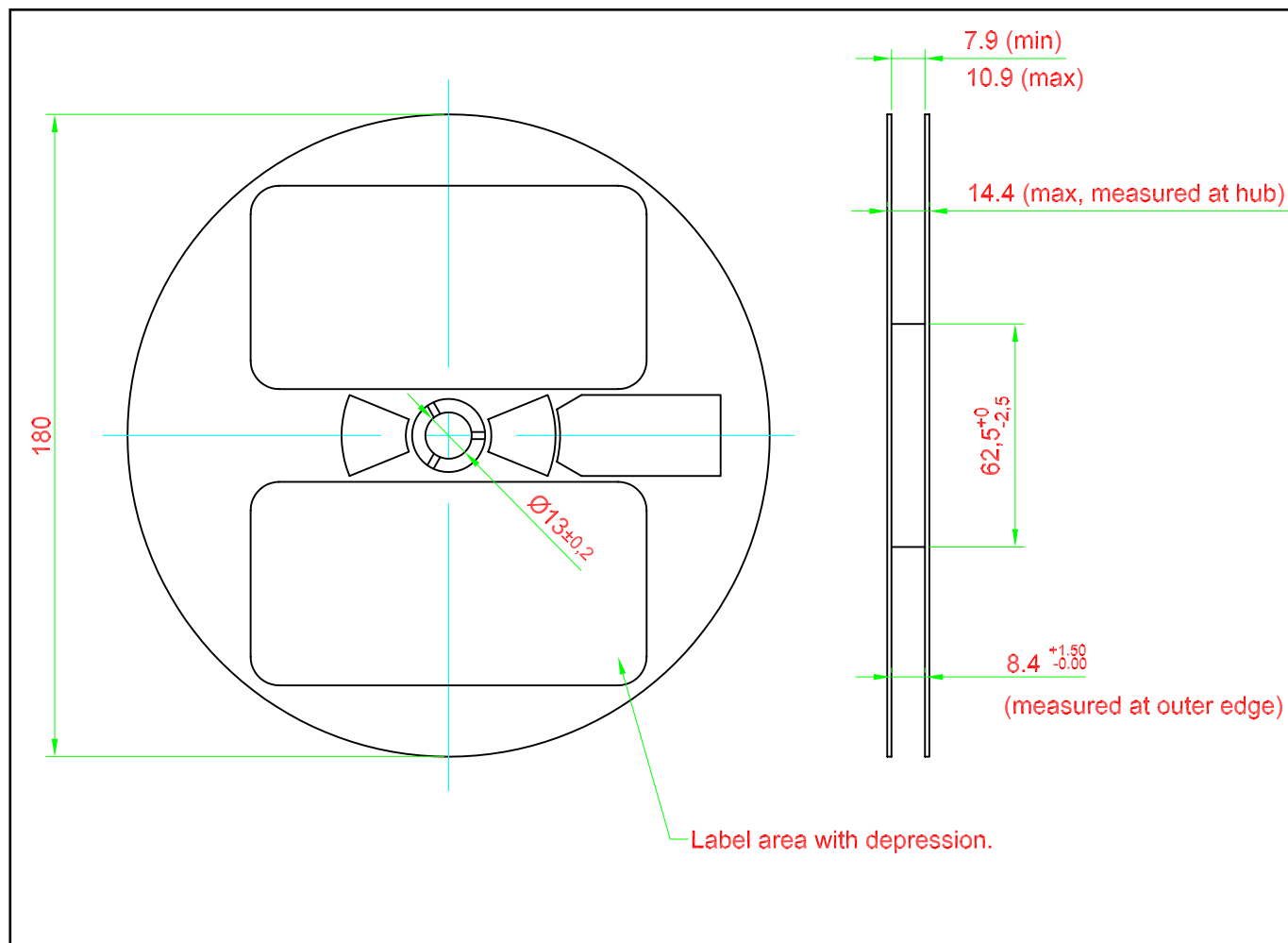
480 mm min. for $\varnothing 180$ reel.

200 mm min. for $\varnothing 330$ reel.

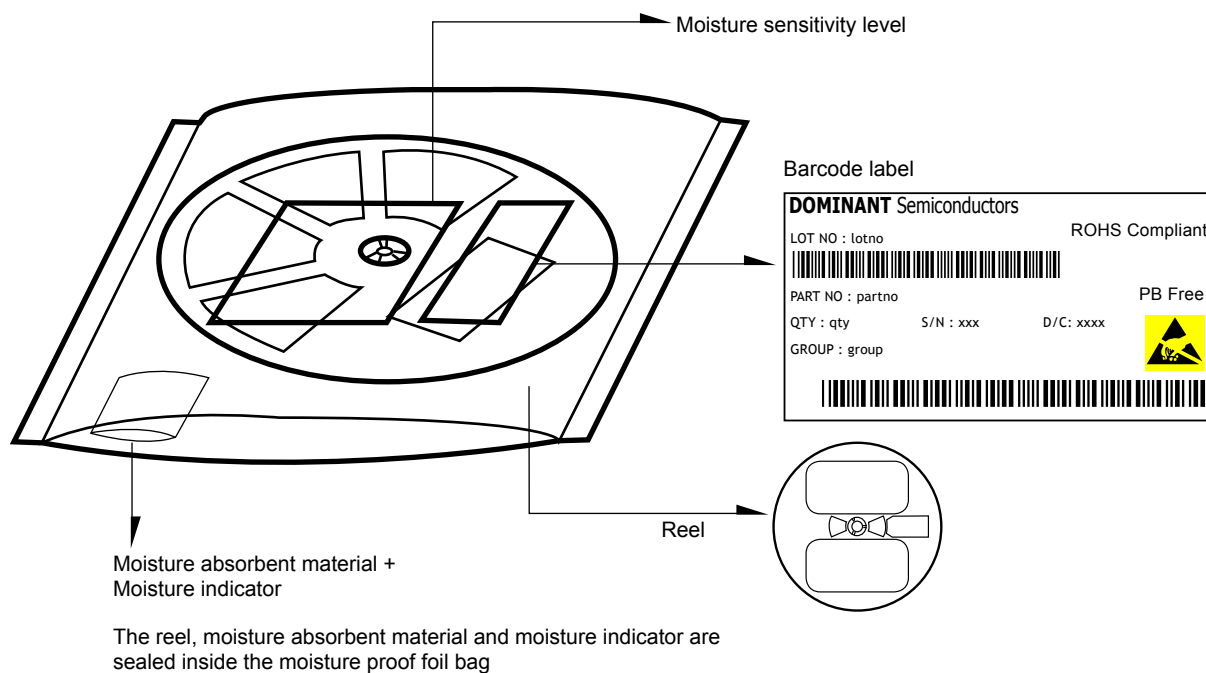
960 mm min. for $\varnothing 330$ reel.



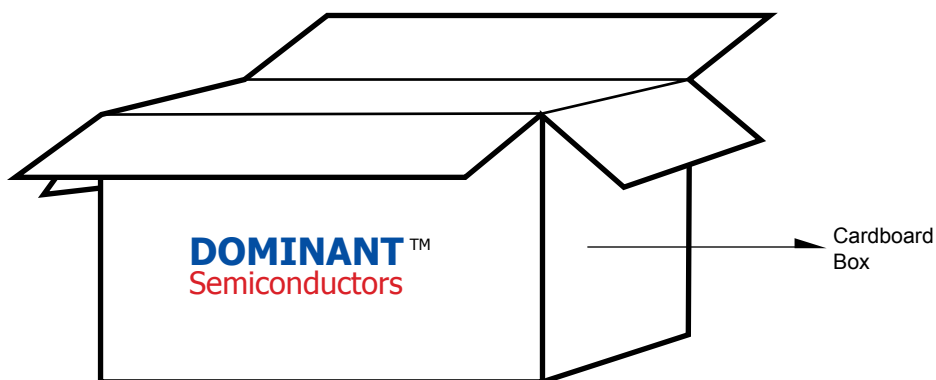
Packaging Specification



Packaging Specification



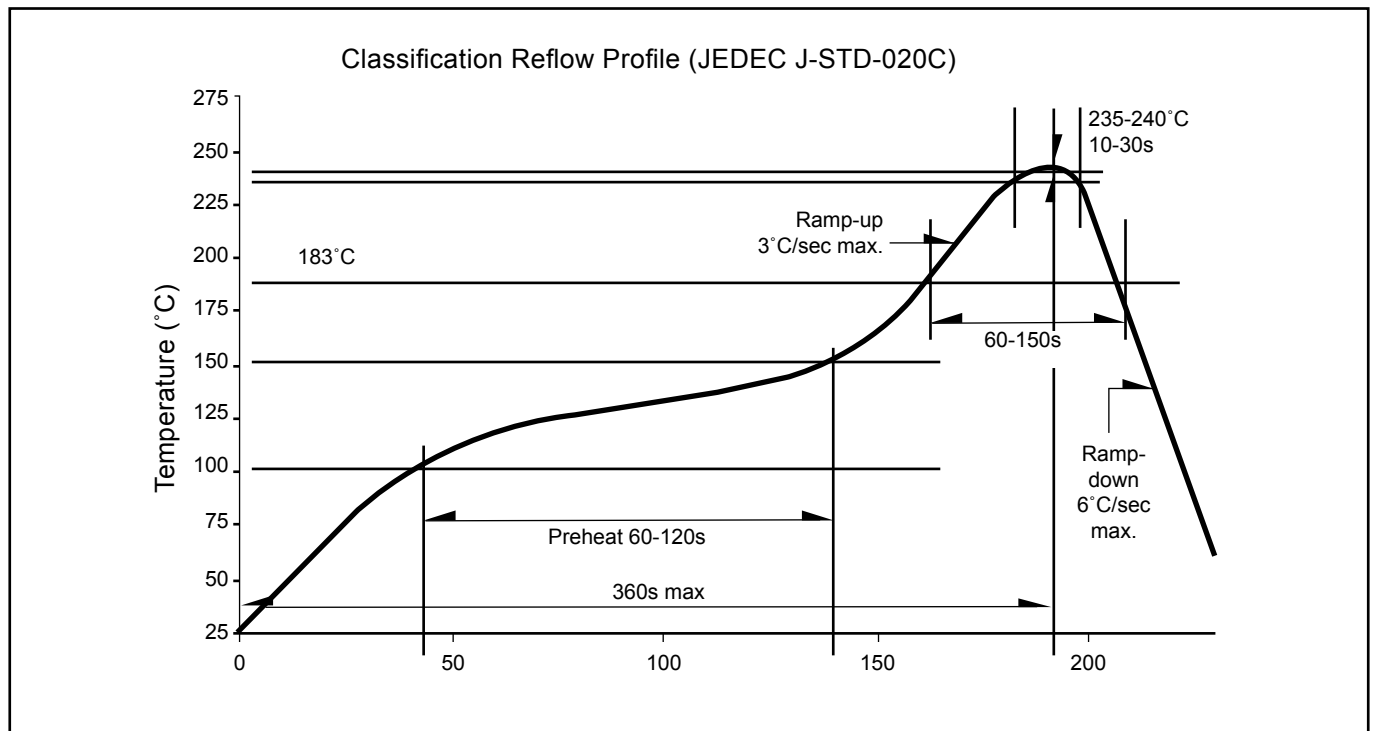
	Average 1pc DomiLED/Multi DomiLED	1 completed bag (2000pcs)
Weight (gram)	0.034	190 ± 10



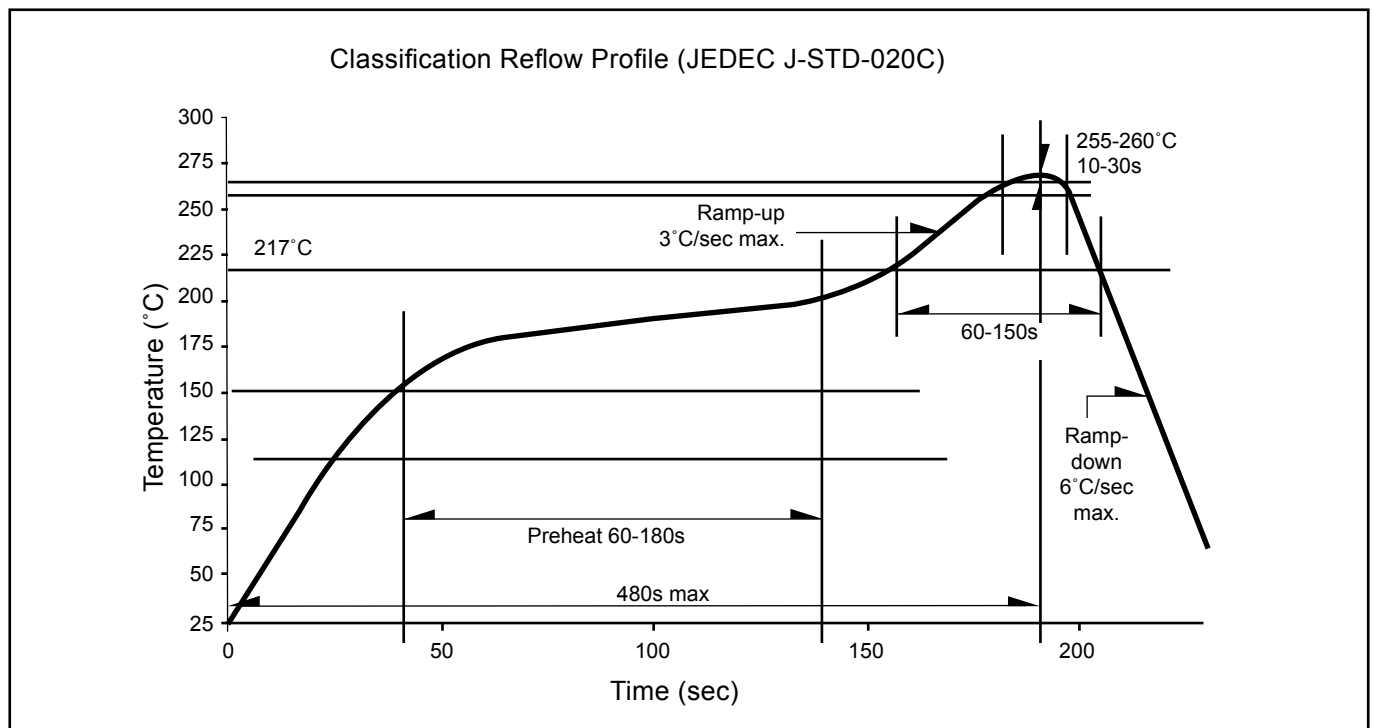
For DomiLED™

Cardboard Box Size	Dimensions (mm)	Empty Box Weight (kg)	Reel / Box	Quantity / Box (pcs)
Small	300 x 250 x 250	0.58	15 reels MAX	30,000 MAX
Large	416 x 516 x 476	1.74	55 reels MAX	110,000 MAX

Recommended Sn-Pb IR-Reflow Soldering Profile



Recommended Pb-free Soldering Profile



Revision History

Page	Subjects	Date of Modification
-	New Format	06 Sept 2005

NOTE

All the information contained in this document is considered to be reliable at the time of publishing. However, DOMINANT Semiconductors does not assume any liability arising out of the application or use of any product described herein.

DOMINANT Semiconductors reserves the right to make changes at any time without prior notice to any products in order to improve reliability, function or design.

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About Us

DOMINANT Semiconductors is a dynamic Malaysian Corporation that is among the world's leading SMT LED Manufacturers. An excellence – driven organization, it offers a comprehensive product range for diverse industries and applications. Featuring an internationally certified quality assurance acclaim, DOMINANT's extra bright LEDs are perfectly suited for various lighting applications in the automotive, consumer and communications as well as industrial sectors. With extensive industry experience and relentless pursuit of innovation, DOMINANT's state-of-art manufacturing, research and testing capabilities have become a trusted and reliable brand across the globe. More information about DOMINANT Semiconductors can be found on the Internet at <http://www.dominant-semi.com>.

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