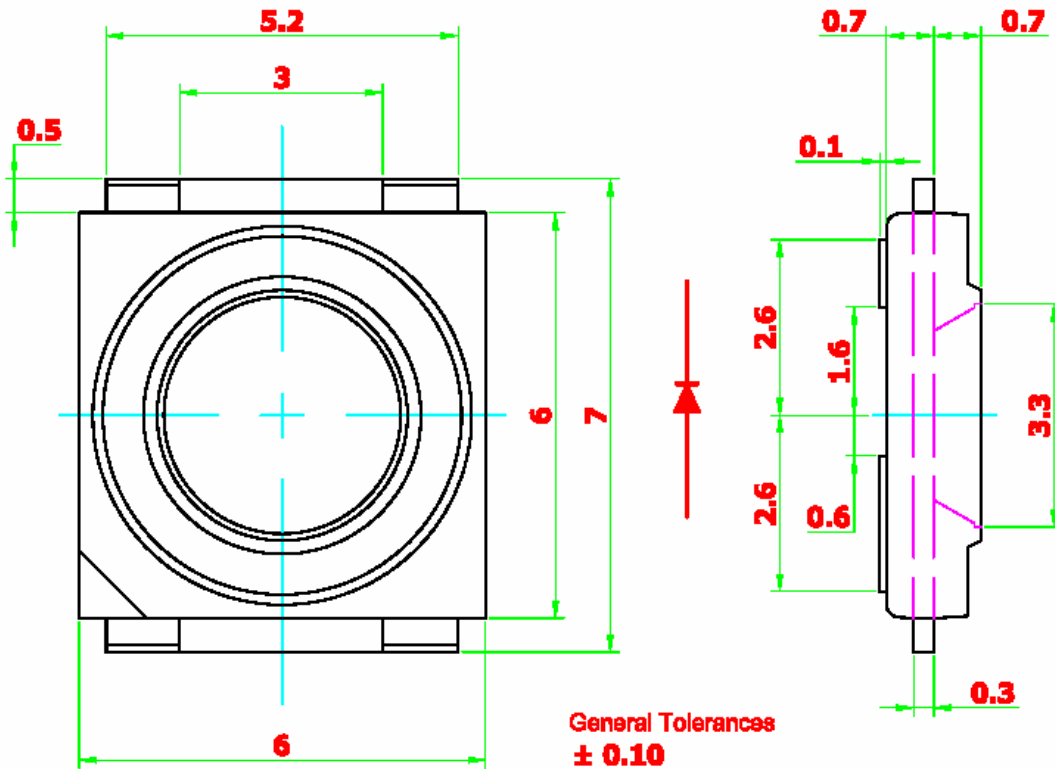


Engineering reference data are not verified. The specifications are subject to change without notice.

NovaLED 350 InGaN – High Lumens



- Super high brightness surface mount LED.
- High flux output; 45 lumens minimum.
- 120° viewing angle.
- Compact package outline (LxW) of 6.0 x 6.0 mm. Ultra low height profile – 1.5 mm.
- Designed for high current drive; Maximum 350 mA.
- Low thermal resistance; $R_{th(j-s)} = 20 \text{ K/W}$.
- Compatible to both IR reflow soldering.
- **Nova LEDs are Class 1M LED products. Do not view directly with optical instrument.**





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

Material

	Material
Lead-frame.	Cu Alloy With Ag Plating.
Package.	High Temperature Resistant Plastic, PPA.
Encapsulant	Epoxy Resin.
Soldering Leads.	Sn-Sn Plating.

Note: This product is Pb free.

Absolute Maximum Ratings

	Maximum Value	Unit
DC forward current.	350	mA
Peak pulse current	1000	mA
Reverse voltage.	5	V
LED junction temperature.	120	°C
Operating temperature.	-40 ... +100	°C
Storage temperature.	-40 ... +100	°C

Optical Characteristics at Ta=25°C.

Part Number	Color	Flux @ If=350mA	Intensity @ If=350mA (mcd)			Viewing Angle
		Typ. (lm)	Min	Typ.	Max	
BL-PPW-TSD-ADE1	White	48	14,000	17,000	22,400	120

IV Bin	Intensity @ If = 350mA (mcd)	
	Min	Max
AD	14,000	18,000
AE	18,000	22,400

1. Luminous intensity is measured with an accuracy of ±11%.
2. Wavelength binning is carried for all units as per the wavelength-binning table. Only one wavelength group is allowed for each reel.

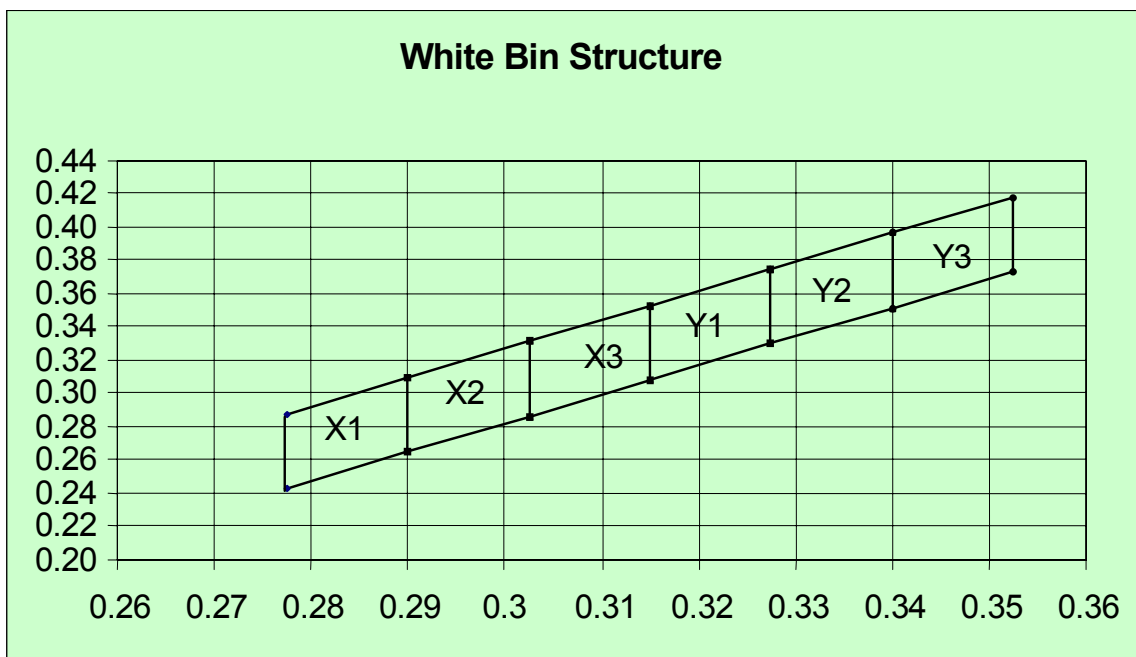
Engineering reference data are not verified. The specifications are subject to change without notice.

Electrical Characteristics at Ta=25°C.

		Vf @ If=350mA		Vr @ Ir=10uA
Part Number	Color	Typ. (V)	Max. (V)	Min.(V)
BL-PPW-TSD	White	3.6	4.0	5

Forward voltage, Vf is measured with a current pulse of 1 ms and an accuracy of ±0.1 V.

Color Bin



Chromaticity coordinate groups are measured with an accuracy of ±0.01.

		1	2	3	4
X1	Cx	0.2775	0.29	0.29	0.2775
	Cy	0.243	0.265	0.310	0.288
X2	Cx	0.29	0.3025	0.3025	0.29
	Cy	0.265	0.286	0.331	0.310
X3	Cx	0.3025	0.315	0.315	0.3025
	Cy	0.286	0.308	0.353	0.331
Y1	Cx	0.315	0.3275	0.3275	0.315
	Cy	0.308	0.330	0.375	0.353
Y2	Cx	0.3275	0.34	0.34	0.3275
	Cy	0.330	0.351	0.396	0.375
Y3	Cx	0.34	0.3525	0.3525	0.34
	Cy	0.351	0.373	0.418	0.396



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Correlated Color Temperature (CCT)

Color Bin	Minimum CCT (K)	Maximum CCT (K)
Y3	4500	5000
Y2	5000	5500
Y1	5500	6000
X3	6000	7000
X2	7000	8000
X1	8000	9000

Note: CCT values provided for each of the color bins are an approximation based on correlation.

Correlation Between Luminous Intensity And Luminous Flux.

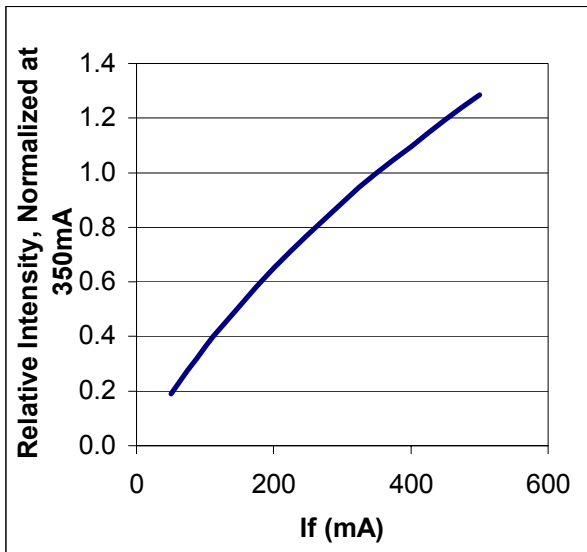
IV Bin	Luminous Intensity (mcd)		Luminous Flux (lm)	
	Min	Max	Min	Max
AD	14,000	18,000	39.0	50.0
AE	18,000	22,400	50.0	63.0

Note: Data provided above is based on approximation.

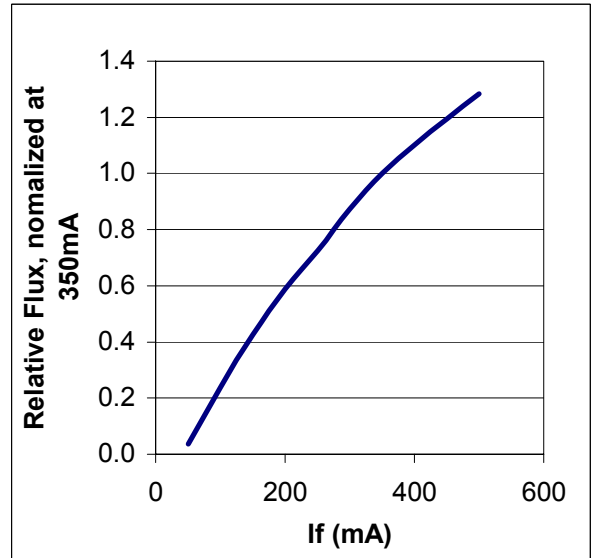


Engineering reference data are not verified. The specifications are subject to change without notice.

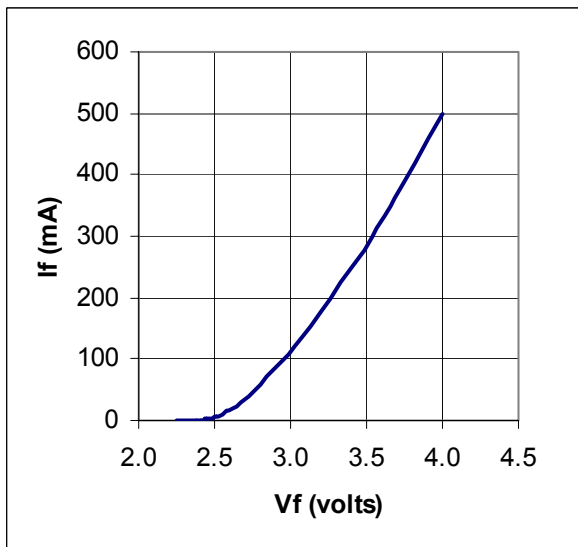
Relative luminous intensity vs. forward current.



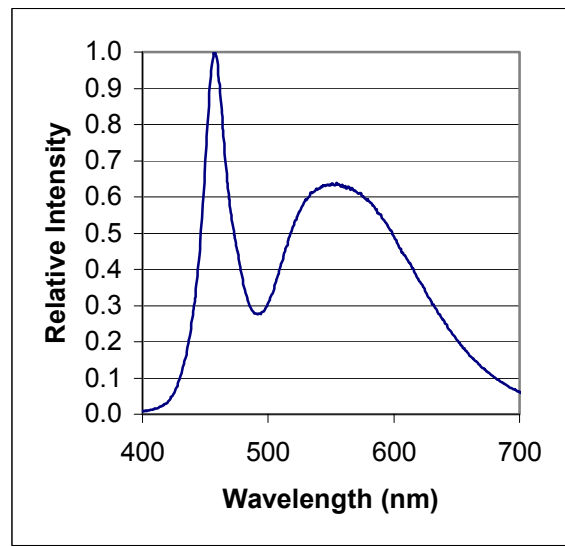
Flux vs. forward current.



Forward current vs. forward voltage.



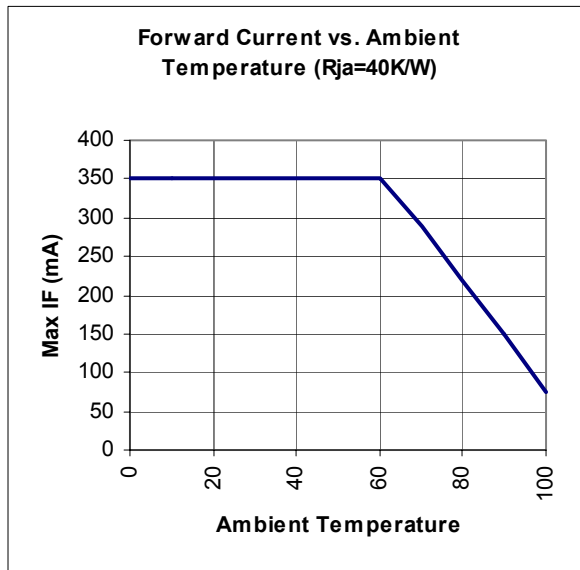
Relative Spectra Emission



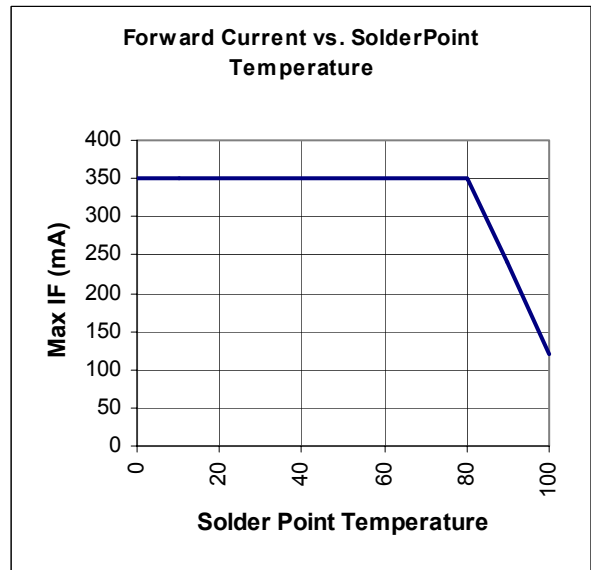


Engineering reference data are not verified. The specifications are subject to change without notice.

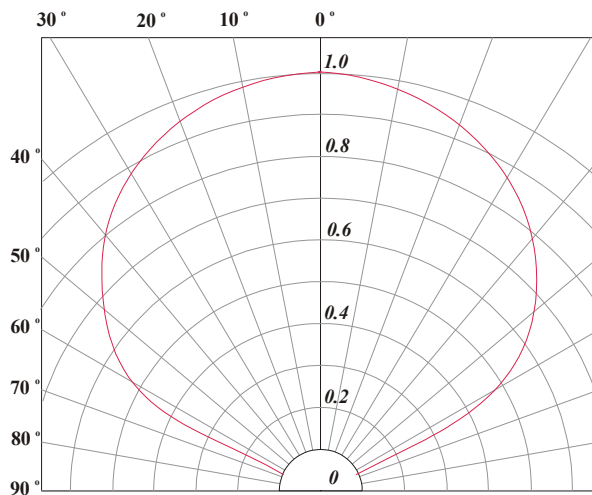
Maximum Permissible Current.



Maximum Permissible Current.



Radiation pattern.

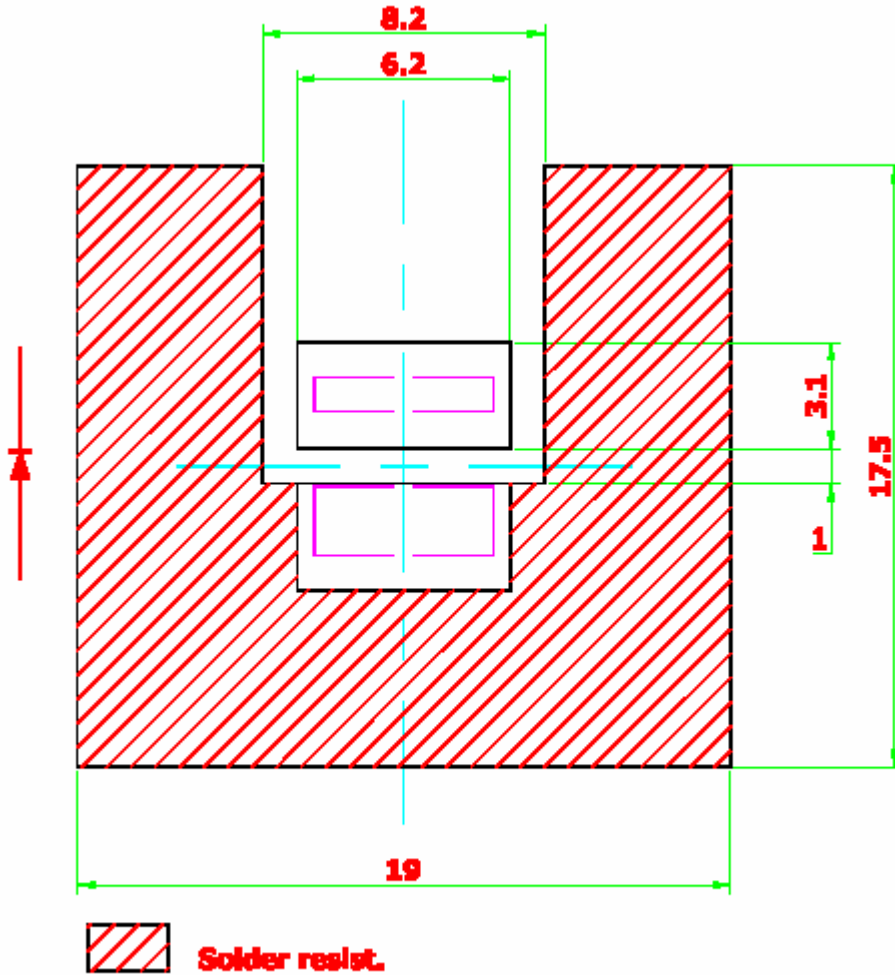




Engineering reference data are not verified. The specifications are subject to change without notice.

Solder Pad Design.

Note : Unit to unit pitching must not be less than 25 mm. Metal core circuit board (MCPCB) is highly recommended for high density applications. Please consult sales and marketing for additional information.



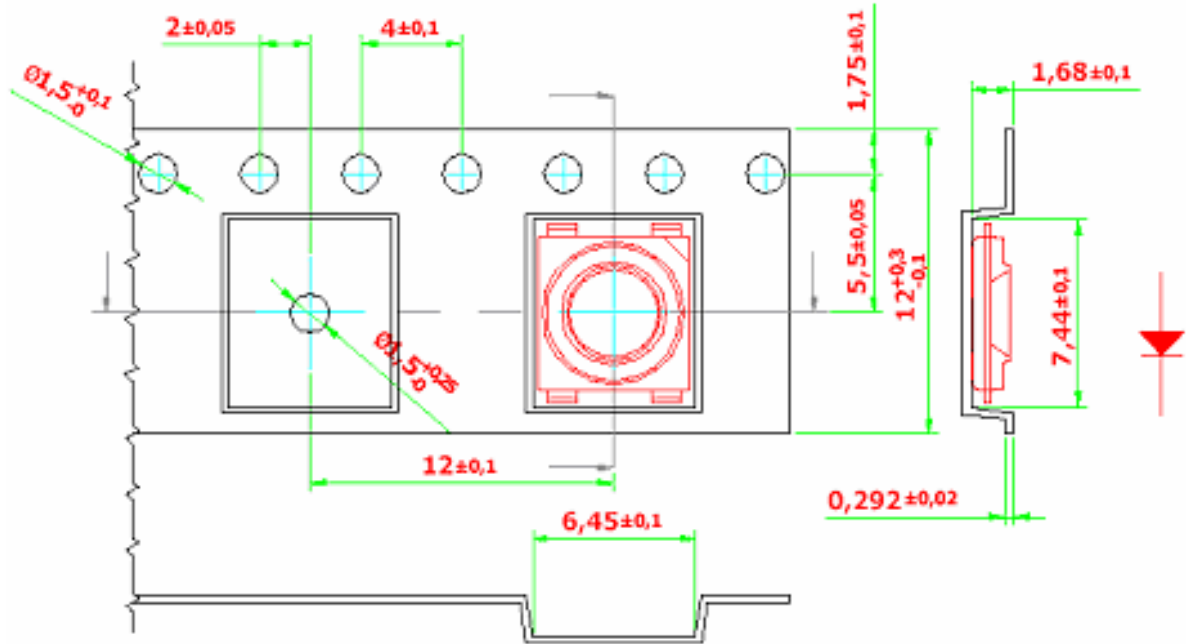


Engineering reference data are not verified. The specifications are subject to change without notice.

Taping And Orientation.

Reels come in quantity of 2000 units.

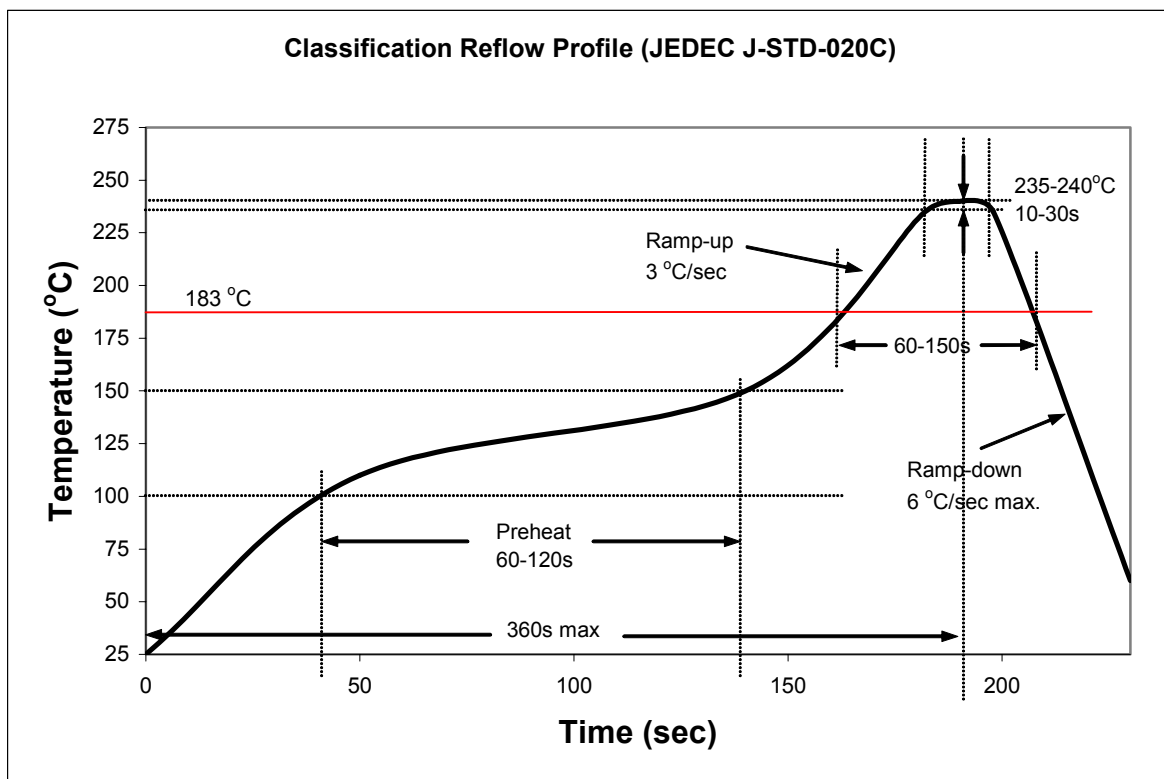
Reel diameters are 330 mm.





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Recommended Sn-Pb IR-Reflow Soldering Profile.



Recommended Pb Free IR-Reflow Soldering Profile.

