

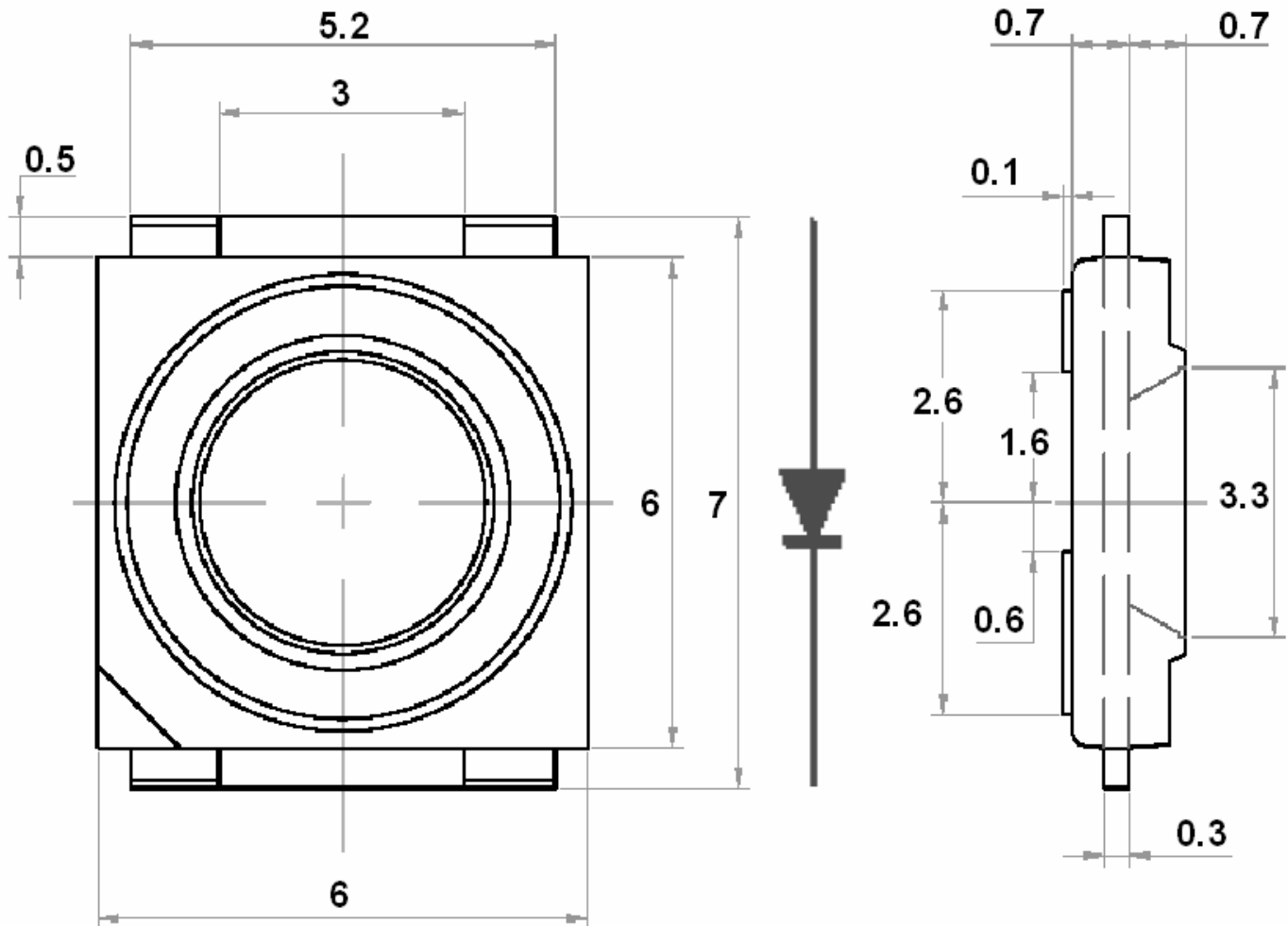


American Opto Plus L-995UXC

6 x 6 x 1.5mm ULTRA BRIGHT SMD

- ❖ High current drive device: 175mA
- ❖ High flux output
- ❖ Compatible to IR-reflow soldering
- ❖ 120° Viewing angle

PACKAGE DIMENSIONS



Notes: Unit = mm, Tolerance = ± 0.10 mm unless otherwise specified

Part Number	Chip	Viewing Angle	Total Flux mlm (min - typ) $I_F = 175\text{mA}$	Luminous Intensity mcd (min - typ) $I_F = 175\text{mA}$
L995UEC	AlInGaP 625nm	120°	3500 – 5000	1800
L995UYC	AlInGaP 589nm	120°	3500 – 5500	2000



American Opto Plus

L-995UXC

6 x 6 x 1.5mm ULTRA BRIGHT SMD

- ❖ High current drive device: 175mA
- ❖ High flux output
- ❖ Compatible to IR-reflow soldering
- ❖ 120° Viewing angle

ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Parameter	Symbol	Max Rating	Unit
DC Forward Current	I _F	175	mA
Reverse Voltage	V _R	15.0	V
LED Junction Temperature		125	°C
Operating Temperature Range	T _{OPR}	-40 ~ +100	°C
Storage Temperature Range	T _{STG}	-40 ~ +100	°C
Power dissipation	P _D	525	mW

OPTICAL CHARACTERISTICS AT 25°C, I_F = 175mA, R_{JA} = 100K/W L995UEC (Red)

Symbol	I _V		V _F		λ _D	
Parameter	Luminous Intensity		Forward Voltage		Dominant Wavelength	
Condition	I _F = 175mA		I _F = 175mA			
Unit	mcd		V		nm	
Binning	Grade	Range	Grade	Range	Grade	Range
	W1	1124 – 1400	Typ	2.2	Full	620 – 630
	W2	1400 – 1800	Max	2.8		
	X1	1800 – 2240	Full	1.9 – 2.8		
	X2	2240 – 2850	01	1.9 – 2.2		
	Y1	2850 – 3550	02	2.2 – 2.5		
	Y2	3550 – 4500	03	2.5 – 2.8		

L995UYC (Amber)

Symbol	I _V		V _F		λ _D	
Parameter	Luminous Intensity		Forward Voltage		Dominant Wavelength	
Condition	I _F = 175mA		I _F = 175mA			
Unit	mcd		V		nm	
Binning	Grade	Range	Grade	Range	Grade	Range
	W1	1124 – 1400	Typ	2.2	Full	585 – 597
	W2	1400 – 1800	Max	2.8	W	585 – 588
	X1	1800 – 2240	Full	1.9 – 2.8	X	588 – 591
	X2	2240 – 2850	01	1.9 – 2.2	Y	591 – 594
	Y1	2850 – 3550	02	2.2 – 2.5	Z	594 – 597
	Y2	3550 – 4500	03	2.5 – 2.8		

Notes:

- 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.
- 3) Dominant wavelength is measured with an accuracy of ± 1nm.
- 4) Forward voltage is measured with an accuracy of ± 0.1 V.

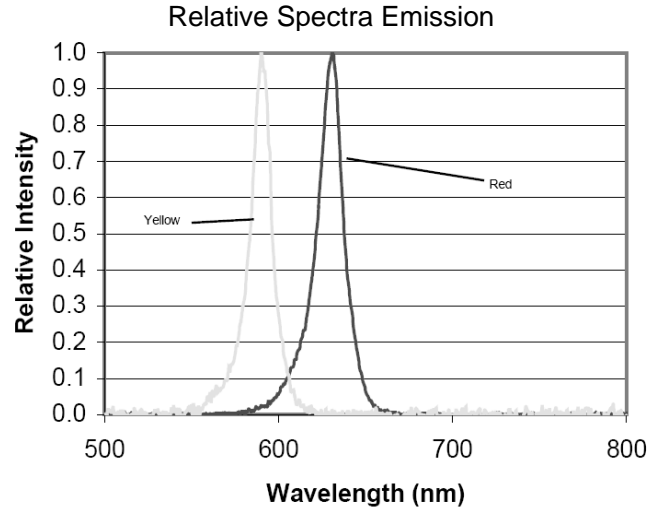
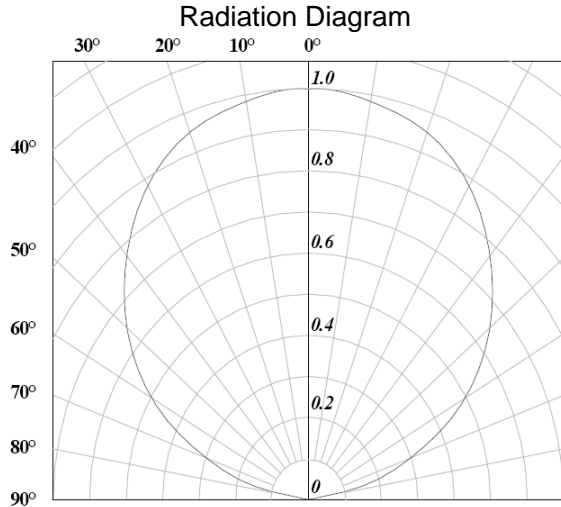


American Opto Plus L-995UXC

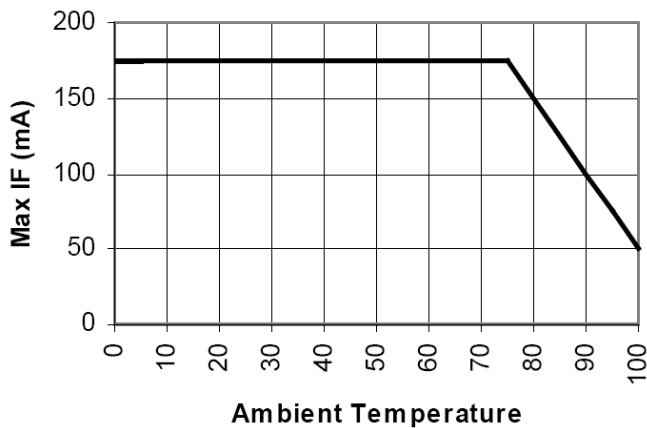
6 x 6 x 1.5mm ULTRA BRIGHT SMD

- ❖ High current drive device: 175mA
- ❖ High flux output
- ❖ Compatible to IR-reflow soldering
- ❖ 120° Viewing angle

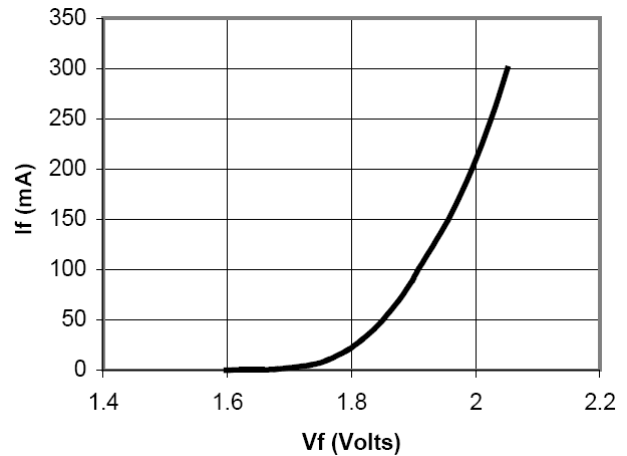
TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES



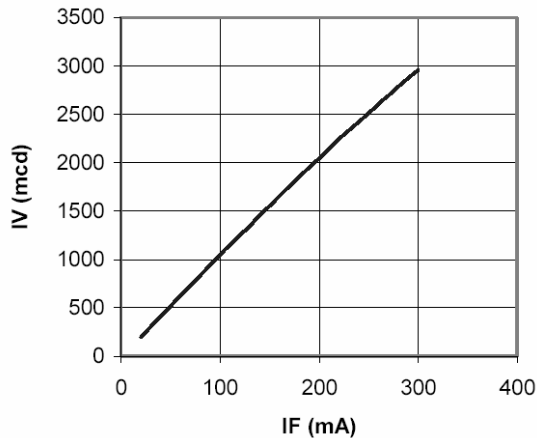
Forward Current vs. Ambient Temp. ($R_{\theta j a} = 110\text{K/W}$)



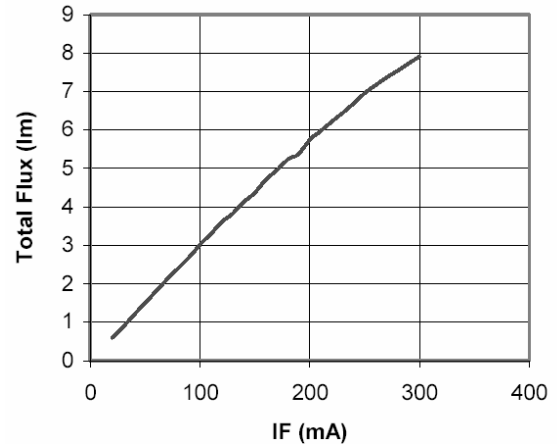
Forward Current vs. Forward Voltage



Luminous Intensity vs. Forward Current



Total Flux vs. Forward Current





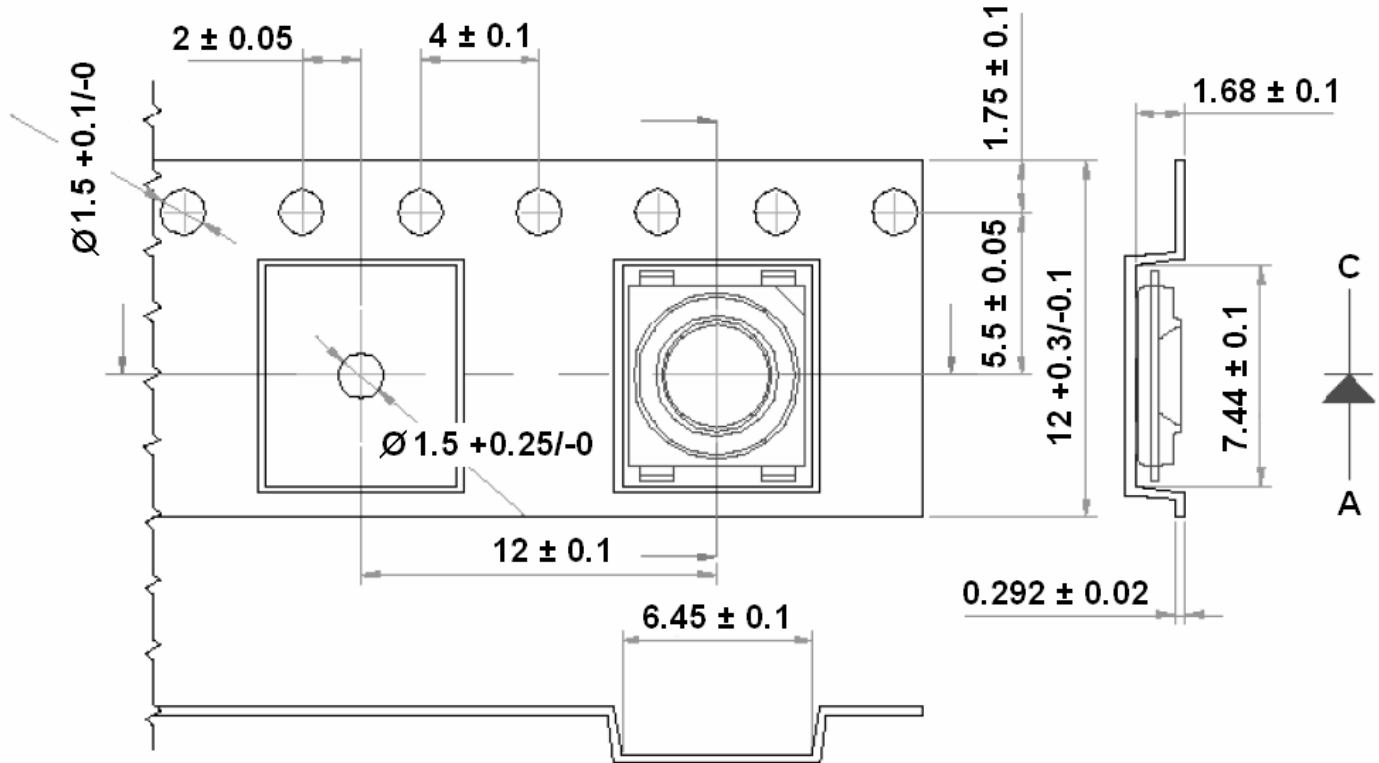
American Opto Plus L-995UXC

6 x 6 x 1.5mm ULTRA BRIGHT SMD

- ❖ High current drive device: 175mA
- ❖ High flux output
- ❖ Compatible to IR-reflow soldering
- ❖ 120° Viewing angle

TAPING AND ORIENTATION

Reels come in quantity of 2000 units. Reel diameter is 330mm.



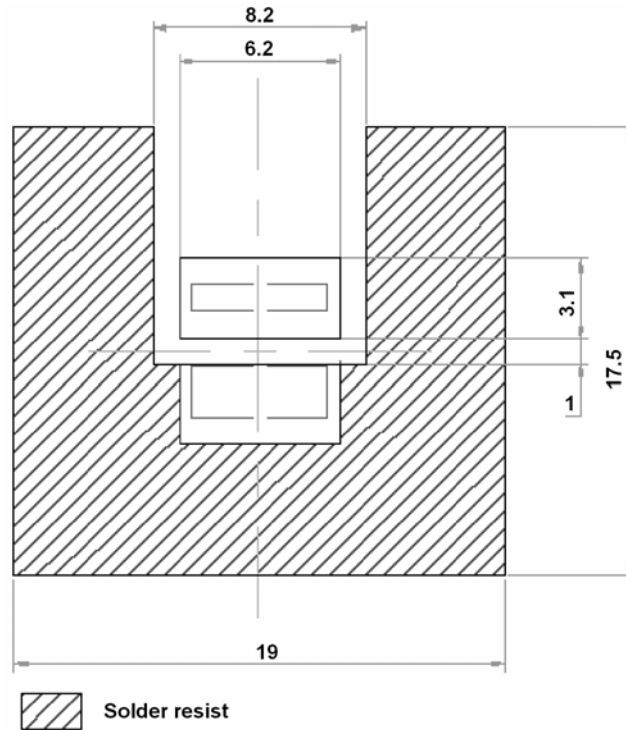


American Opto Plus L-995UXC

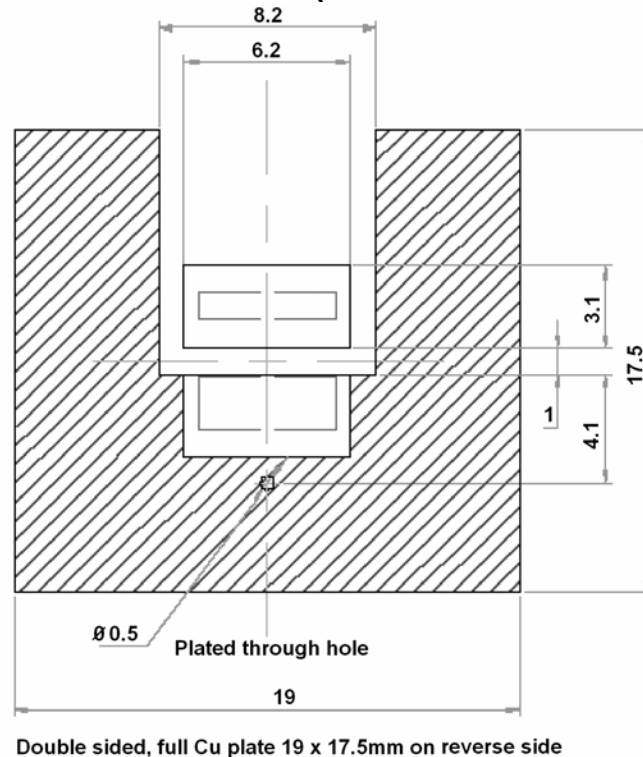
6 x 6 x 1.5mm ULTRA BRIGHT SMD

- ❖ High current drive device: 175mA
- ❖ High flux output
- ❖ Compatible to IR-reflow soldering
- ❖ 120° Viewing angle

SOLDER PAD DESIGN



RECOMMENDED SOLDER PAD DESIGN (for better heat dissipation)



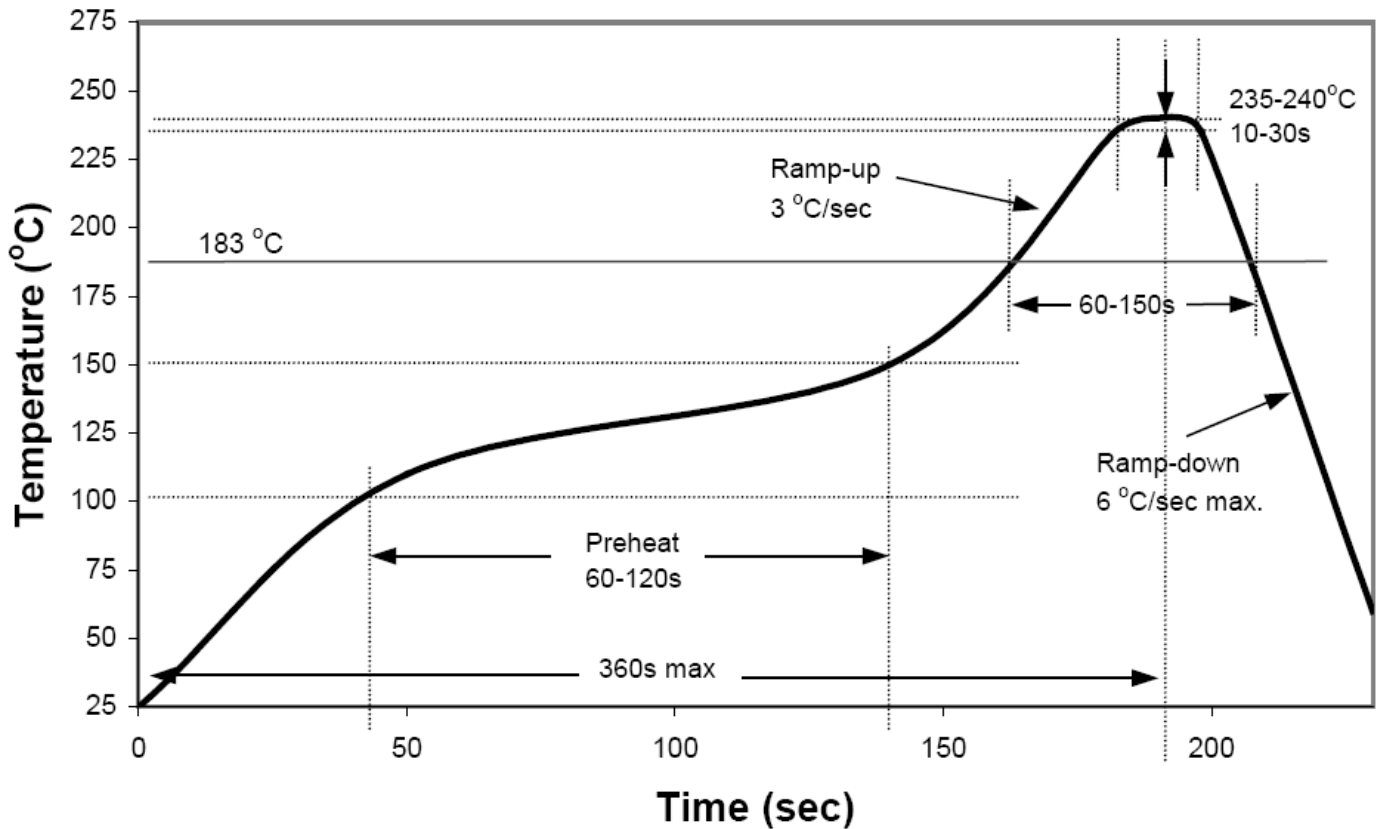


American Opto Plus L-995UXC

6 x 6 x 1.5mm ULTRA BRIGHT SMD

- ❖ High current drive device: 175mA
- ❖ High flux output
- ❖ Compatible to IR-reflow soldering
- ❖ 120° Viewing angle

RECOMMENDED Sn-Pb IR-REFLOW SOLDERING PROFILE (Classification Reflow Profile JEDEC J-STD-020C)





American Opto Plus L-995UXC

6 x 6 x 1.5mm ULTRA BRIGHT SMD

- ❖ High current drive device: 175mA
- ❖ High flux output
- ❖ Compatible to IR-reflow soldering
- ❖ 120° Viewing angle

RECOMMENDED Pb-free IR-REFLOW SOLDERING PROFILE (Classification Reflow Profile JEDEC J-STD-020C)

