



Pb Free

RoHS Compliant

Features

- Small size
- Low loss
- Built-in 2LPF for receiver

Applications

- GSM900/DCS

How to Order

LM - D 5 18 S2 - 2 □
① ② ③ ④ ⑤ ⑥

① Series

② Circuit

D Dual

③ Type

④ Height

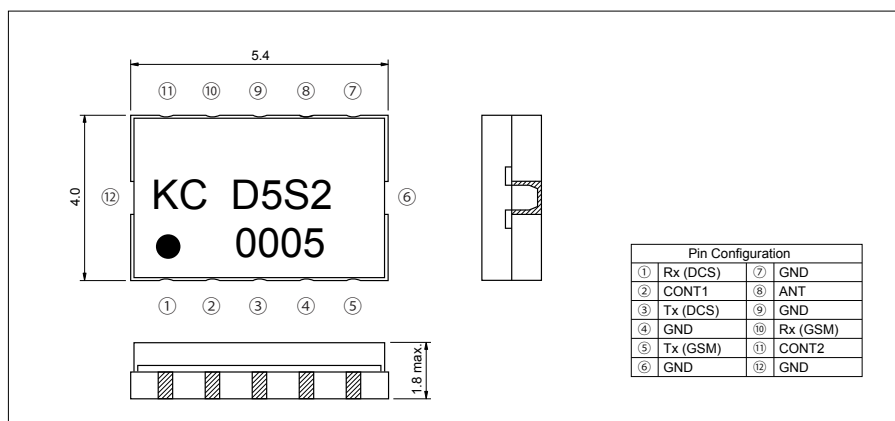
18 1.8mm max.

⑤ S2: GSM900/DCS

⑥ Custom Specification

Dimensions

(Unit : mm)



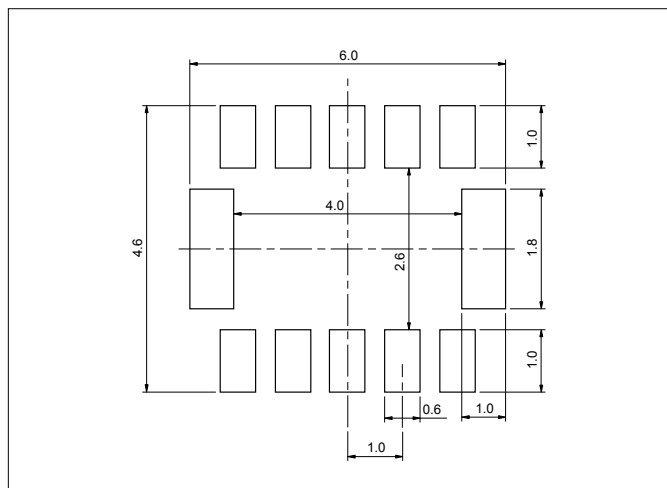
Specifications

(at 25°C)

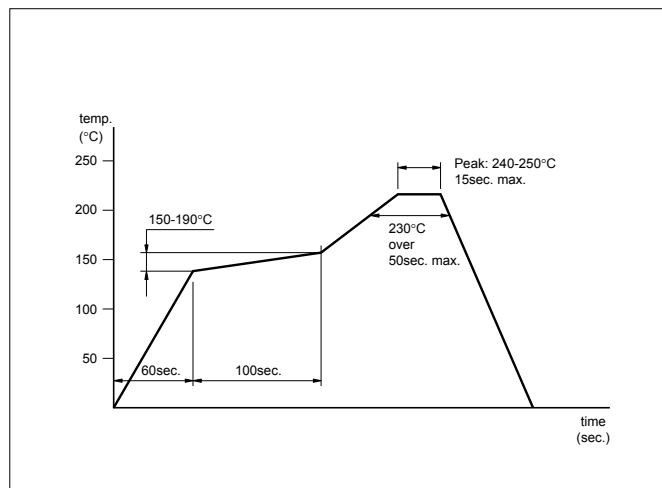
Part No.	GSM					DCS				
	TX			RX		TX			RX	
	Freq. (MHz)	Ins. Loss (dB)	Att. (2*f0, 3*f0) (dB)	Freq. (MHz)	Ins. Loss (dB)	Freq. (MHz)	Ins. Loss (dB)	Att. (2*f0, 3*f0) (dB)	Freq. (MHz)	Ins. Loss (dB)
LM-D518S2-2	880 to 915	≤1.1	≥30	925 to 960	≤1	1710 to 1785	≤1.3	≥25	1805 to 1880	≤1.2

Recommended Land Pattern

(Unit : mm)



Recommended Reflow Profile





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Features

- Small and low profile
- Low loss
- Built-in 2LPF for receiver
- Excellent shock-resistant
- Support multiple bands (GSM850/GSM900/DCS (GSM1800)/ PCS (GSM1900))

Applications

- GSM850/ GSM900/ DCS/ PCS for Dual Band

How to Order

LM - D 6 15 S3
① ② ③ ④ ⑤

① Series

② Circuit

D Dual

③ Type

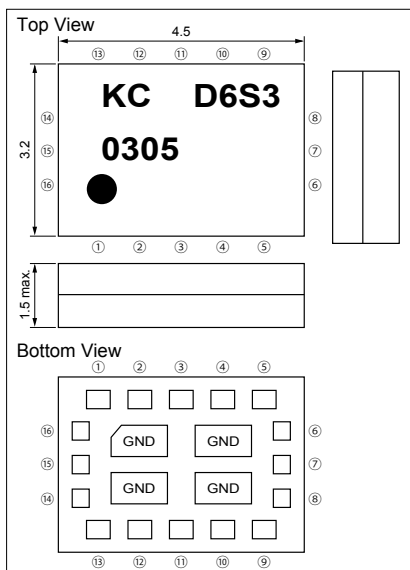
④ Height

15 1.5mm max.

⑤ Custom Specification

Dimensions (LM-D615S3)

(Unit : mm)

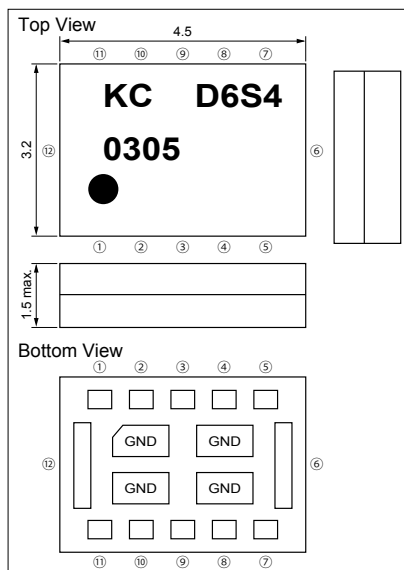


Pin Assingment (LM-D615S3)

①	GND
②	TX1 (GSM850/900)
③	GND
④	N.C
⑤	RX2 (DCS/PCS)
⑥	N.C
⑦	RX1 (GSM850/900)
⑧	N.C
⑨	N.C
⑩	VCont1
⑪	GND
⑫	ANT
⑬	GND
⑭	VCont2
⑮	GND
⑯	TX2 (DCS/PCS)

Dimensions (LM-D615S4)

(Unit : mm)



Pin Assingment (LM-D615S4)

①	RX2 (DCS/PCS)
②	VCont1
③	TX2 (DCS/PCS)
④	GND
⑤	TX1 (GSM850/900)
⑥	GND
⑦	GND
⑧	ANT
⑨	GND
⑩	RX1 (GSM850/900)
⑪	VCont2
⑫	GND

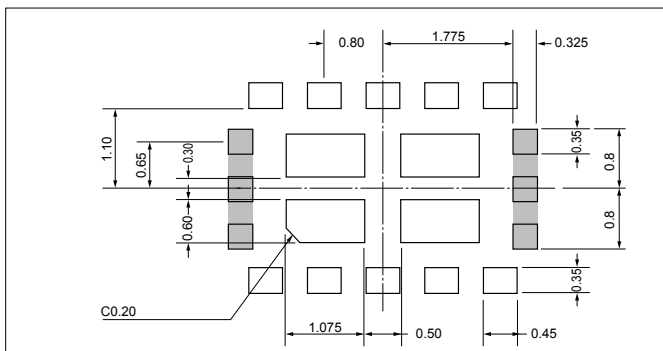
Specifications

(at 25°C)

Part No.	GSM (850/900)					DCS/PCS				
	TX			RX		TX			RX	
	Freq. (MHz)	Ins. Loss (dB)	Att. (2*f ₀ , 3*f ₀) (dB)	Freq. (MHz)	Ins. Loss (dB)	Freq. (MHz)	Ins. Loss (dB)	Att. (2*f ₀ , 3*f ₀) (dB)	Freq. (MHz)	Ins. Loss (dB)
LM-D615S3	824 to 849	≤1.2	≥35(2*f ₀), ≥30(3*f ₀)	869 to 894	≤1.1	1710 to 1785	≤1.4	≥30	1805 to 1880	≤1.3
	880 to 915			925 to 960		1850 to 1910			1930 to 1990	
LM-D615S4	824 to 849	≤1.2	≥35(2*f ₀), ≥30(3*f ₀)	869 to 894	≤1	1710 to 1785	≤1.4	≥25	1805 to 1880	≤1.2
	880 to 915			925 to 960		1850 to 1910			1930 to 1990	

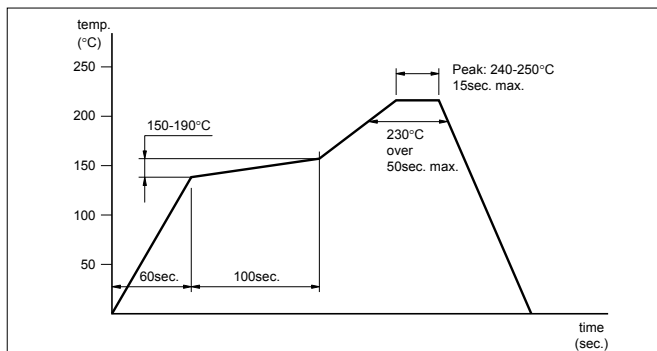
Recommended Land Pattern

(Unit : mm)



Shaded land area for LM-D615S4.

Recommended Reflow Profile





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Features

- Small and low profile
- Low loss
- Built-in 2LPF for receiver
- Excellent shock-resistant
- Support multiple bands (GSM850/GSM900/DCS (GSM1800)/ PCS (GSM1900))

Applications

- GSM850/ GSM900/ DCS/ PCS for Triple Band

How to Order

LM - T 6 15 S3
① ② ③ ④ ⑤

① Series

② Circuit

T Triple

③ Type

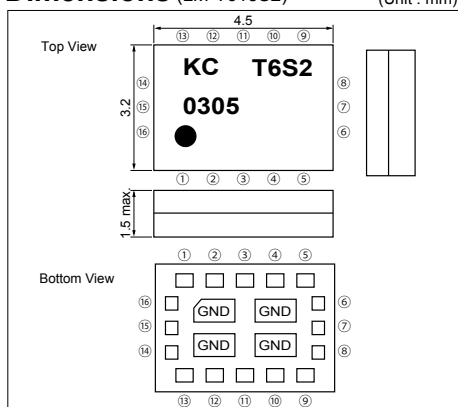
④ Height

15 1.5mm max.

⑤ Custom Specification

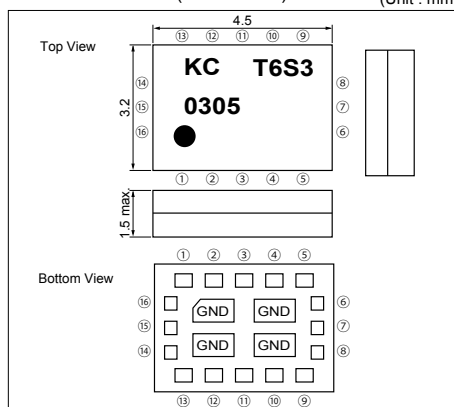
Dimensions (LM-T615S2)

(Unit : mm)



Dimensions (LM-T615S3)

(Unit : mm)



Pin Assignment (LM-T615S2)

① GND	⑨ GND
② N.C	⑩ ANT
③ RX1 (GSM850/900)	⑪ N.C
④ RX2 (DCS)	⑫ GND
⑤ RX3 (PCS)	⑬ GND
⑥ VCont1	⑭ TX2 (DCS/PCS)
⑦ VCont2	⑮ GND
⑧ VCont3	⑯ TX1 (GSM850/900)

Pin Assignment (LM-T615S3)

① GND	⑨ N.C
② TX1 (GSM850/900)	⑩ VCont1
③ GND	⑪ GND
④ RX3 (PCS)	⑫ ANT
⑤ RX2 (DCS)	⑬ GND
⑥ N.C	⑭ VCont2
⑦ RX1 (GSM850/900)	⑮ GND
⑧ N.C	⑯ TX2 (DCS/PCS)

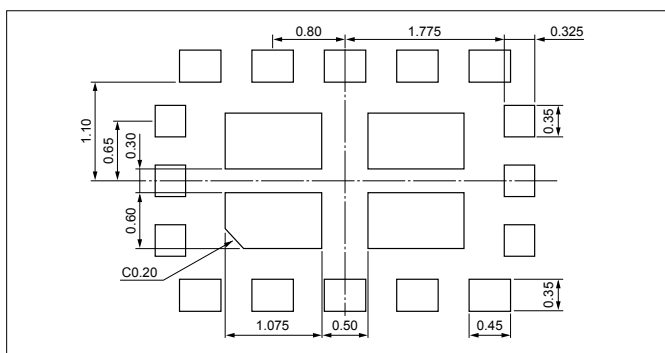
Specifications

(at 25°C)

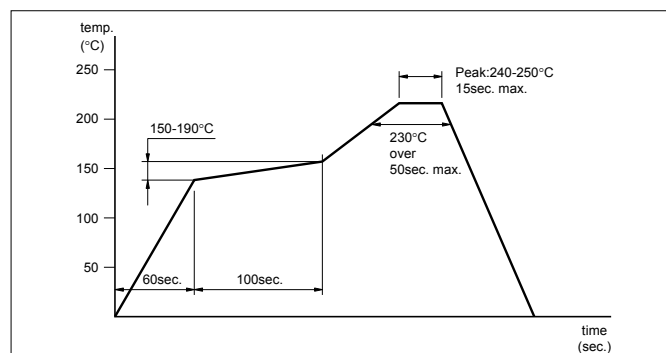
Part No.	GSM (850/900)					DCS/PCS				
	TX			RX		TX			RX	
	Freq. (MHz)	Ins. Loss (dB)	Att. (2*f ₀ , 3*f ₀) (dB)	Freq. (MHz)	Ins. Loss (dB)	Freq. (MHz)	Ins. Loss (dB)	Att. (2*f ₀ , 3*f ₀) (dB)	Freq. (MHz)	Ins. Loss (dB)
LM-T615S2	824 to 849	≤1.2	≥30(2*f ₀), ≥30(3*f ₀)	869 to 894	≤1	1710 to 1785	≤1.5	≥30 (2*f ₀ , 3*f ₀)	1805 to 1880	≤1.4
	880 to 915			925 to 960		1850 to 1910			1930 to 1990	
LM-T615S3	824 to 849	≤1.2	≥30(2*f ₀), ≥30(3*f ₀)	869 to 894	≤1	1710 to 1785	≤1.5	≥30 (2*f ₀ , 3*f ₀)	1805 to 1880	≤1.4
	880 to 915			925 to 960		1850 to 1910			1930 to 1990	

Recommended Land Pattern

(Unit : mm)



Recommended Reflow Profile





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RoHS Compliant

Features

- Small and low profile
- Low current consumption
- Built-in 2LPF for receiver
- Built-in ESD protection circuit
- Excellent shock-resistant
- Support multiple bands (GSM850/GSM900/DCS (GSM1800)/ PCS (GSM1900))
- Include ESD protection

Applications

- GSM/ Quad System

How to Order

LX - Q 6 14 S2 E
① ② ③ ④ ⑤ ⑥

① Series

② Circuit

Q Quad

③ Type

④ Height

15 1.4mm max.

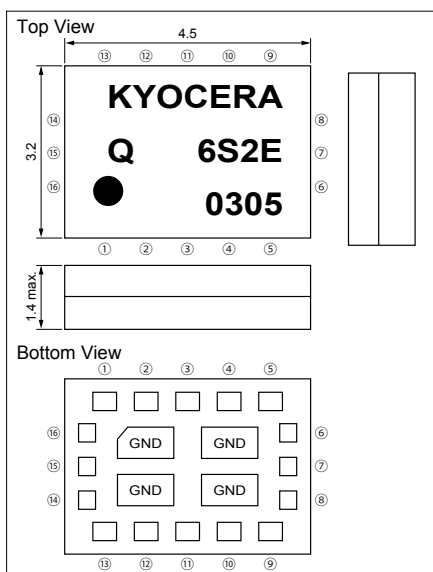
⑤ Custom Specification

⑥ ESD Protection

E Built-in ESD Protection Circuit

Dimensions

(Unit : mm)



Pin Assingment

①	GND	⑨	GND
②	RX1 (GSM850)	⑩	ANT
③	RX2 (GSM900)	⑪	V _{DD}
④	RX3 (DCS)	⑫	GND
⑤	RX4 (PCS)	⑬	GND
⑥	VCont1	⑭	TX2 (DCS/PCS)
⑦	VCont2	⑮	GND
⑧	VCont3	⑯	TX1 (GSM850/900)

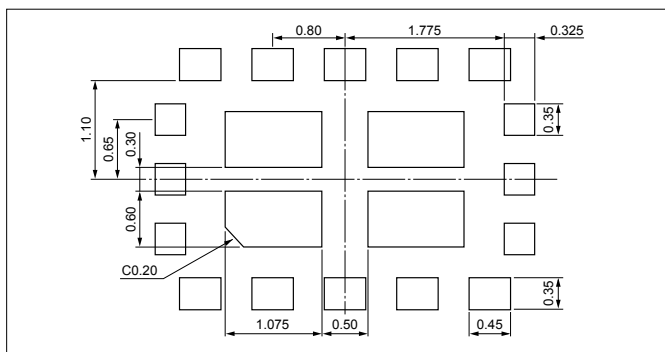
Specifications

(at 25°C)

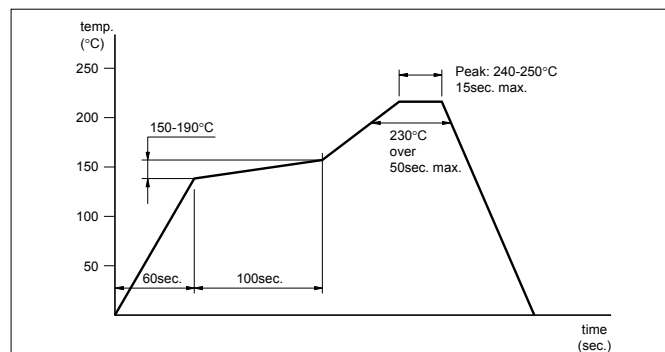
Part No.	GSM (850/900)					DCS/PCS				
	TX			RX		TX			RX	
	Freq. (MHz)	Ins. Loss (dB)	Att. (2*f ₀ , 3*f ₀) (dB)	Freq. (MHz)	Ins. Loss (dB)	Freq. (MHz)	Ins. Loss (dB)	Att. (2*f ₀ , 3*f ₀) (dB)	Freq. (MHz)	Ins. Loss (dB)
LX-Q614S2E	824 to 849	≤1.45	≥30 (2*f ₀ , 3*f ₀)	869 to 894	≤1.5	1710 to 1785	≤1.55	≥30 (2*f ₀ , 3*f ₀)	1805 to 1880	≤1.5
	880 to 915			925 to 960		1850 to 1910			1930 to 1990	

Recommended Land Pattern

(Unit : mm)



Recommended Reflow Profile





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Features

- Low loss and low current consumption with GaAs switch
- Excellent insertion loss of UMTS pass with typical 0.6dB
- Excellent isolation to Rx DCS with minimum of 32dB
- Rx terminal is compatible with GSM850/ 900/ 1800/ 1900MHz

Applications

- GSM/ Quad + UMTS Single

How to Order

LX - P 6 12 S2
① ② ③ ④ ⑤

① Series

② Circuit

P GSM Quad + UMTS single

③ Type

④ Height

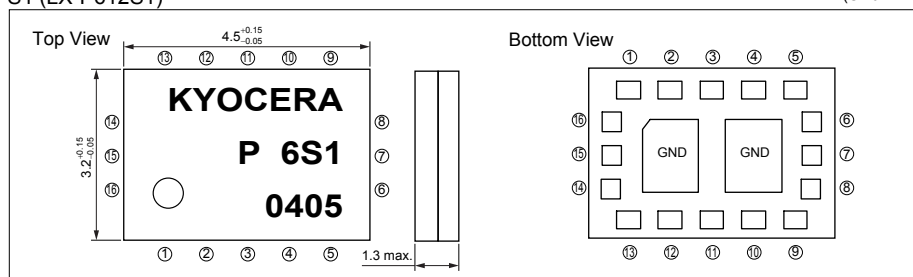
15 1.3mm max.

⑤ Custom Specification

Dimensions

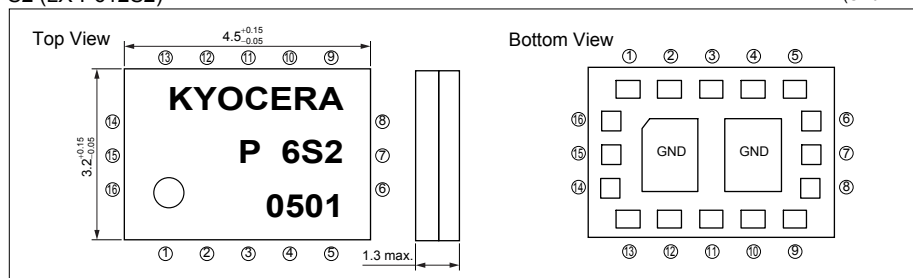
S1 (LX-P612S1)

(Unit : mm)



S2 (LX-P612S2)

(Unit : mm)



Pin Assigment

(LX-P612S1)

①	RX2(GSM850/900/DCS/PCS)	⑨	GND
②	RX3(GSM850/900/DCS/PCS)	⑩	ANT
③	RX4(GSM850/900/DCS/PCS)	⑪	GND
④	RX1(GSM850/900/DCS/PCS)	⑫	TRX (UMTS)
⑤	GND	⑬	Vdd
⑥	TX2(DCS/PCS)	⑭	Vc1
⑦	GND	⑮	Vc2
⑧	TX1(GSM850/900)	⑯	Vc3

(LX-P612S2)

①	RX2(GSM850/900/DCS/PCS)	⑨	TRX (UMTS)
②	RX3(GSM850/900/DCS/PCS)	⑩	Vdd
③	RX4(GSM850/900/DCS/PCS)	⑪	GND
④	RX1(GSM850/900/DCS/PCS)	⑫	ANT
⑤	GND	⑬	GND
⑥	TX2(DCS/PCS)	⑭	Vc1
⑦	GND	⑮	Vc2
⑧	TX1(GSM850/900)	⑯	Vc3

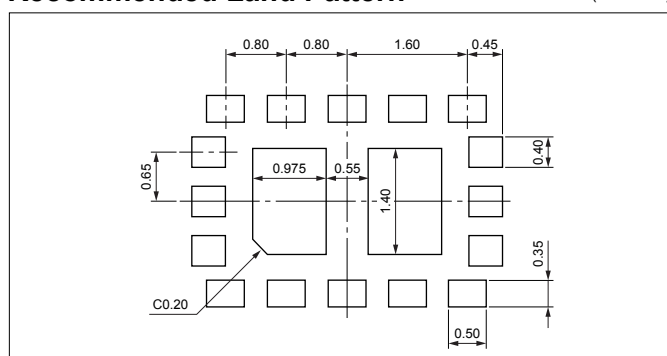
Specifications

(at 25°C)

Part No.	GSM (850/900)					DCS/PCS					UMTS		
	TX			RX		TX			RX		TX		
	Freq. (MHz)	Ins. Loss (dB)	Att. (dB)	Freq. (MHz)	Ins. Loss (dB)	Freq. (MHz)	Ins. Loss (dB)	Att. (dB)	Freq. (MHz)	Ins. Loss (dB)	Freq. (MHz)	Ins. Loss (dB)	Att. (dB)
LX-P612S1	824 to 849	≤1.2	≥67 (2*fo, 3*fo)	869 to 894	≤1.05	1710 to 1785	≤1.4	≥65 (2*fo, 3*fo)	1805 to 1880	≤1.3	1710 to 1785	≤0.85	≥65 (2*fo, 3*fo)
	880 to 915			925 to 960		1850 to 1910			1930 to 1990		1850 to 1910		
LX-P612S2	824 to 849	≤1.2	≥67 (2*fo, 3*fo)	869 to 894	≤1.05	1710 to 1785	≤1.4	≥65 (2*fo, 3*fo)	1805 to 1880	≤1.3	1710 to 1785	≤0.85	≥65 (2*fo, 3*fo)
	880 to 915			925 to 960		1850 to 1910			1930 to 1990		1850 to 1910		

Recommended Land Pattern

(Unit : mm)



Recommended Reflow Profile

