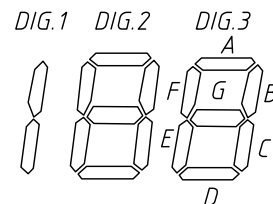
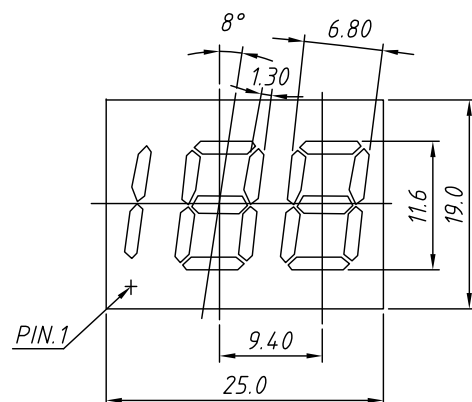
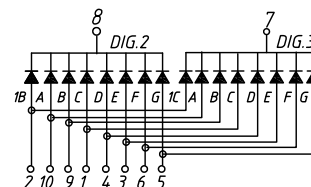


PACKAGE DIMENSION mm

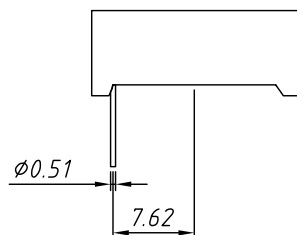
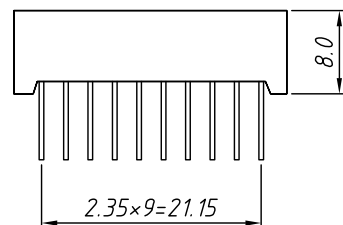
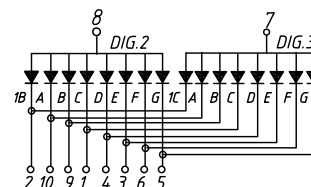


INTERNAL CIRCUIT DIAGRAM

Common Cathode
L-KLS9-D-4531 Ax



Common Anode
L-KLS9-D-4531 Bx



Color Code	Emitting Color	Peak Wavelength	Forward Voltage V_F /Seg.		Luminous Intensity I_V /Seg.	
			Typ.	Max.	Min.	Typ.
		nm	V		mcd	
UHR	Ultra Red	640	2	2.5	40	60
UE	Orange	615	2	2.5	40	60
H	Red	623	2.25	2.5	0.4	0.8
YO	Amber	605	2	2.5	40	60
UY	Yellow	590	2	2.5	40	60
UG	Green	568	2.1	2.5	25	40
PG	Pure Green	525	3.3	3.8	150	200
UB	Blue	465	3.3	3.8	40	100
UW	White		3.3	3.8	200	500

Electro/Optical Characteristics $I_F=20mA$ $T_a=25^\circ C$

Order information

L-KLS9-D-45 3 1 A XX -X X

RoHS
Digit Mode
Character Height
Digit Number:
1-single digit
2-Dual digit
3-Three digit
4-Four digit

Reflector surface color
Color Code:
Drive Mode:
Common Cathode
Common Anode
Model Number:

Maximum Ratings $T_a=25^\circ C$ (Derate above $25^\circ C$)

Characteristic	Test Condition	Symbol	Units	Ultra Red	Orange	Red	Amber	Yellow	Green	Pure Green	Blue	White
				UHR	UE	H	YO	UY	UG	PG	UB	UW
Pulse Forward Current Per Seg.	1/10 duty cycle 0.1ms Pulse width	I_{FP}	mA	100	100	50	100	100	100	100	100	100
DC Forward Current Per Seg.		I_F	mA	30	30	15	30	30	30	30	30	30
Reverse Current Per Seg.	$V_R=5V$	I_R	A	10	10	10	10	10	10	10	10	10
Power Dissipation		P_D	mW	65×8	65×8	40×8	65×8	65×8	75×8	110×8	120×8	120×8

Tolerance:	±0.25mm unless stated	Description:	0.45" Single Digit 7 Segment DISPLAYS
PROJECTION			
UNITS	mm	KLS P/N:	L-KLS9-D-4531XXXXX
SHEET SIZE	A4		
Draw data	2018-1-25		
Check data	2018-1-25		



NingBo KLS ELECTRONIC CO.,L TD.

1

2

3

4

5

6

7

8

A

B

C

D

E

F

G

H

PACKAGE DIMENSION mm

DIG.1

DIG.2

DIG.3

INTERNAL CIRCUIT DIAGRAM

Common Cathode

L-KLS9-D-4531 Cx

Common Anode

L-KLS9-D-4531 Dx

Color Code	Emitting Color	Peak Wavelength	Forward Voltage V _F /Seg.		Luminous Intensity I _v /Seg.	
			Typ.	Max.	Min.	Typ.
		nm		V		mcd
UHR	Ultra Red	640	2	2.5	40	60
UE	Orange	615	2	2.5	40	60
H	Red	623	2.25	2.5	0.4	0.8
YO	Amber	605	2	2.5	40	60
UY	Yellow	590	2	2.5	40	60
UG	Green	568	2.1	2.5	25	40
PG	Pure Green	525	3.3	3.8	150	200
UB	Blue	465	3.3	3.8	40	100
UW	White		3.3	3.8	200	500

Electro/Optical Characteristics I_F=20mA Ta=25°C

Order information

L-KLS9-D-45 3 1 C XX -X X

RoHS

Digit Mode

Character Height

Digit Number:

1-single digit

2-Dual digit

3- Three digit

4-Four digit

Reflector surface color

Color Code:

Drive Mode:

Common Cathode

Common Anode

Model Number:

Maximum Ratings Ta=25°C (Derate above 25°C)												
Characteristic	Test Condition	Symbol	Units	Ultra Red	Orange	Red	Amber	Yellow	Green	Pure Green	Blue	White
				UHR	UE	H	YO	UY	UG	PG	UB	UW
Pulse Forward Current Per Seg.	1/10 duty cycle 0.1ms Pulse width	I _{FP}	mA	100	100	50	100	100	100	100	100	100
DC Forward Current Per Seg.		I _F	mA	30	30	15	30	30	30	30	30	30
Reverse Current Per Seg.	V _R =5V	I _R	A	10	10	10	10	10	10	10	10	10
Power Dissipation		P _D	mW	65×8	65×8	40×8	65×8	65×8	75×8	110×8	120×8	120×8

Tolerance:	±0.25mm unless stated	Description:	0.45" Single Digit
PROJECTION		7 Segment DISPLAYS	
UNITS	mm		
SHEET SIZE	A4	KLS P/N:	L-KLS9-D-4531XXXXX
Draw data	2018-1-25	NingBo KLS ELECTRONIC CO.,L TD.	
Check data	2018-1-25		

1

2

3

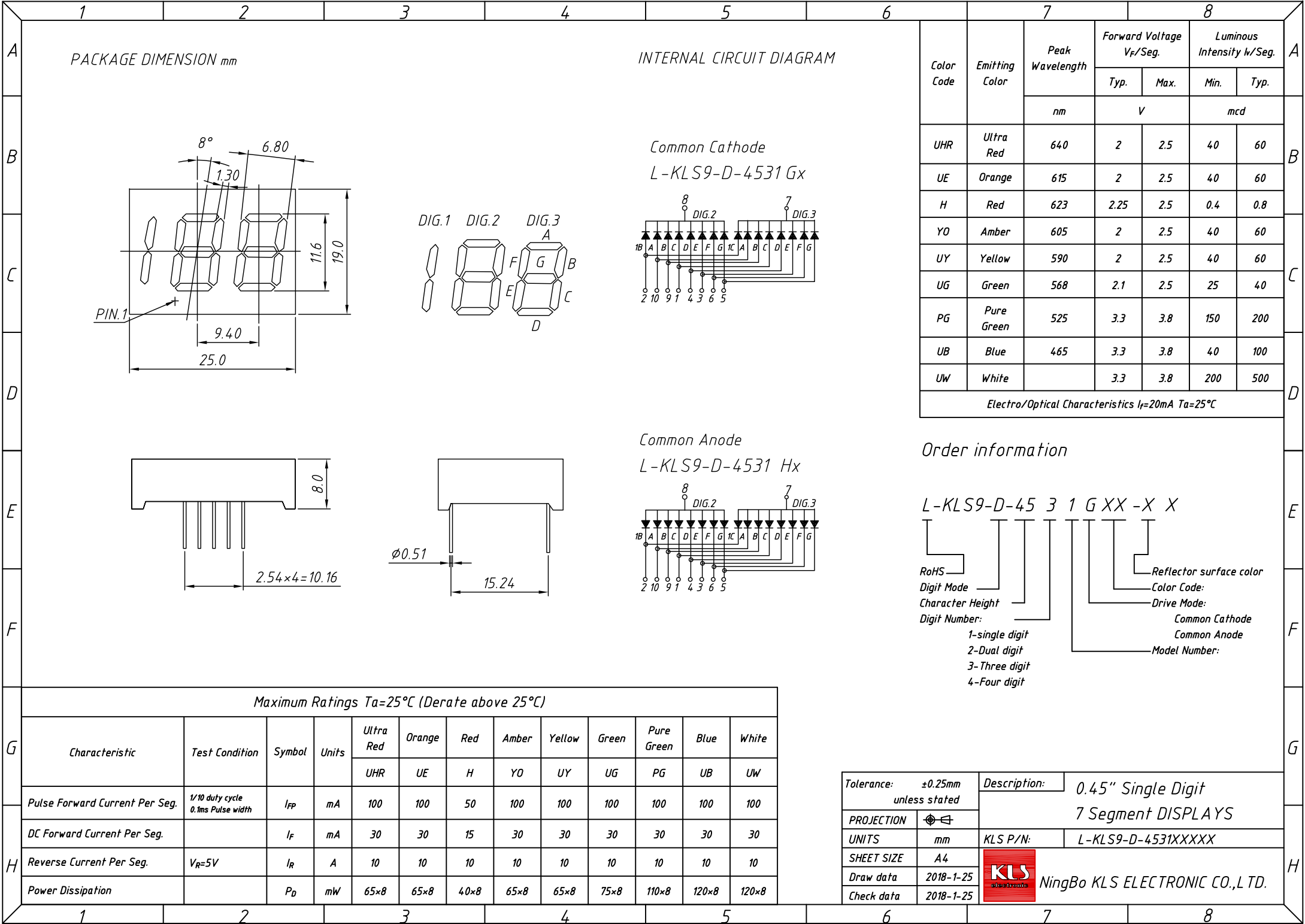
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5

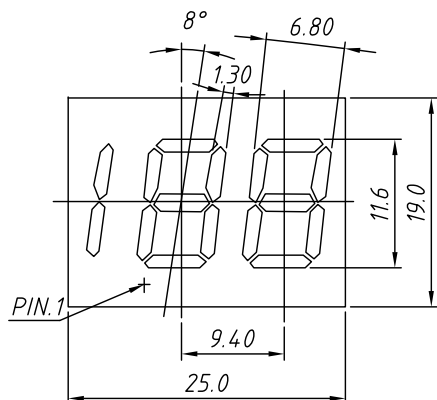
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8

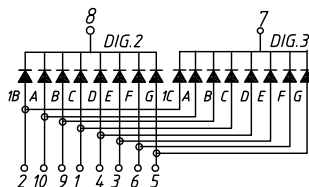


PACKAGE DIMENSION mm

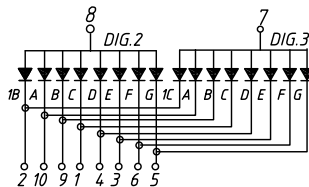


INTERNAL CIRCUIT DIAGRAM

Common Cathode
L-KLS9-D-4531 Gx



Common Anode
L-KLS9-D-4531 Hx



Color Code	Emitting Color	Peak Wavelength	Forward Voltage V _F /Seg.		Luminous Intensity I _v /Seg.	
			Typ.	Max.	Min.	Typ.
		nm	V		mcd	
UHR	Ultra Red	640	2	2.5	40	60
UE	Orange	615	2	2.5	40	60
H	Red	623	2.25	2.5	0.4	0.8
YO	Amber	605	2	2.5	40	60
UY	Yellow	590	2	2.5	40	60
UG	Green	568	2.1	2.5	25	40
PG	Pure Green	525	3.3	3.8	150	200
UB	Blue	465	3.3	3.8	40	100
UW	White		3.3	3.8	200	500

Electro/Optical Characteristics I_F=20mA Ta=25°C

Order information

L-KLS9-D-45 3 1 G XX -X X

RoHS
Digit Mode
Character Height
Digit Number:
1-single digit
2-Dual digit
3-Three digit
4-Four digit
Reflector surface color
Color Code:
Drive Mode:
Common Cathode
Common Anode
Model Number:

Maximum Ratings Ta=25°C (Derate above 25°C)

Characteristic	Test Condition	Symbol	Units	Ultra Red	Orange	Red	Amber	Yellow	Green	Pure Green	Blue	White
				UHR	UE	H	YO	UY	UG	PG	UB	UW
Pulse Forward Current Per Seg.	1/10 duty cycle 0.1ms Pulse width	I _{FP}	mA	100	100	50	100	100	100	100	100	100
DC Forward Current Per Seg.		I _F	mA	30	30	15	30	30	30	30	30	30
Reverse Current Per Seg.	V _R =5V	I _R	A	10	10	10	10	10	10	10	10	10
Power Dissipation		P _D	mW	65×8	65×8	40×8	65×8	65×8	75×8	110×8	120×8	120×8

Tolerance: ±0.25mm unless stated		Description: 0.45" Single Digit 7 Segment DISPLAYS	
PROJECTION			
UNITS	mm	KLS P/N:	L-KLS9-D-4531XXXXX
SHEET SIZE	A4	NingBo KLS ELECTRONIC CO.,L TD.	
Draw data	2018-1-25		
Check data	2018-1-25		

