• DISPLAY (Including 7-Segment Display, Alphanumeric Display, Clock Display)

X X X – X X X X X – X X X

- Version 1,2,3.....9
- Surface Ink Color:
  0–White 1–Black 2–Gray 3–Red
- Polarity
  A–Common Anode C–Common Cathode
  U–Universal
- Dice Code:
  UB–InGaN/SiC Blue TB–InGaN/Al2O3 Blue
  PG–InGaN/SiC Pure Green GU–Gap/Gap Yellow Green
  UG–AlGaInP/GaAs Yellow Green HY–GaAsP/GaP Yellow
  UY–AlGaInP/GaAs Yellow YO–AlGaInP/GaAs
  HO–GaAsP/GaP Orange UR–AlGaInP/GaAs Red
  SR–AlGaAs/GaAs Red
  D1–HO+GU D2–SR+GU D3–SD+GU
- Segment Type
  0–Water Clear 1–White 2–Red 3–Orange
  4–Yellow 5–Green T–Tape for Air Gap
- Digit Height (inch)
  30–0.3" 56–0.56" A0–1.0" A2–1.2"
  B0–2.0" C0–3.0" D0–4.0" E0–5.0"
- Digit Count Statement
  1-Single Digit (8, 18, ☒,1 ☒)
  2-Dual Digit (88, 188, ☒ ☒J1 ☒ ☒)
  3-Triad Digit (888,1888, ☒ ☒ ☒ ,1 ☒ ☒ ☒)
  9-Nine Digit (888..... ☒ ☒ . . . . .)
- D– 7–Segment Display (8)
  E– 18, 188, 1888.....
  X–Alphanumeric Display (☒ , ☒ ☒ , ☒ ☒ ☒ .....)
  Y– 1 ☒ ,1☒ ☒, 1 ☒ ☒ ☒ .....
- B–Bonding Type Product

For Example: BD2–561UR–A21
Description: Display, 2 Digit ,Gray surface, White Diffused segment, Digit Height 0.56"
AlGaInP/GaAs Red, Common–Anode

• DOT MATRIX

X X X – X X X X X – X X X X

- Version 1,2,3...
- Surface Ink Color:
  0–White 1–Black 2–Gray 3–Red
- Dot Color
  0–Water Clear 1–White 2–Red 3–Orange T–Tape
- Polarity (Row)
  A–Common Anode C–Common Cathode
  U–Universal
- Dice Code
  UB–InGaN/SiC Blue TB–InGaN/Al2O3 Blue
  PG–InGaN/SiC Pure Green GU–Gap/Gap Yellow Green
  UG–AlGaInP/GaAs Yellow Green HY–GaAsP/GaP Yellow
  UY–AlGaInP/GaAs Yellow YO–AlGaInP/GaAs
  HO–GaAsP/GaP Orange UR–AlGaInP/GaAs Red
  SR–AlGaAs/GaAs Red
  D1–HO+GU,D2–SD+UG,D3–SR+GU
  F1–HO+GU+UB F2–HO+PG+UB F3–UR+GU+UB
  F4–SR+GU+UB
- Reflector Height (Inch)
  08–0.8" 24–2.4"
- Type of Dot Matrix (Length by Height)
  57–5X7 88–8X8 80–8X10 AA–11X11 FF–16X16
- Dot Size (mm)
  4-¢3.75mm 5-¢5mm 0-¢10mm A-¢11mm
  E-¢15mm S-Square Dot
- M–Dot Matrix
- B–Bonding Type S–Surface Mounting Type
  P–PCB Assembly Type

For Example: BM5–8824SR–A111
Description: Dot Matrix, ¢5mm Dot, 8X8, Height 2.4", single–Color, Black Surface, White Diffused Dot, Common–Anode

PART NUMBER SYSTEM

• BACK LIGHT

X X X X X – X X X X X X X X X – X X

Version 01,02,...99

Emitting Color

UB–InGaN/SiC Blue　　TB–InGaN/Al2O3 Blue

PG–InGaN/SiC Pure Green　　GU–Gap/Gap Yellow Green

UG–AlGaInP/GaAs Yellow Green　　HY–GaAsP/GaP Yellow

UY–AlGaInP/GaAs Yellow　　YO–AlGaInP/GaAs

HO–GaAsP/GaP Orange　　UR–AlGaInP/GaAs Red

SR–AlGaAs/GaAs Red

Dimension of Width

008–7.5~8.4mm　015–15mm　108–108mm

Dimension of Length

009–8.5~9.4mm　016–16mm　209–209mm

Number of Chips

008–8pcs　018–18pcs　180–180pcs

BL– Back Light

For Example: BL003–097063CW–01
Back–Light,Cool white 3 PCS LED,97mmX63mm,

• LIGHT BAR

X X X – X X X X X X X X – X X X

Version 1,2,3.... 9

Epoxy Color

0–Water clear 1–White 2–Red 3–Orange T–Tape

Polarity

A–Common Anode C–Common Cathode U–Universal

Emitting Color

UB–InGaN/SiC Blue　　TB–InGaN/Al2O3 Blue

PG–InGaN/SiC Pure Green　　GU–Gap/Gap Yellow Green

UG–AlGaInP/GaAs Yellow　　Green HY–GaAsP/GaP Yellow

UY–AlGaInP/GaAs Yellow　　YO–AlGaInP/GaAs

HO–GaAsP/GaP Orange　　UR–AlGaInP/GaAs Red

SR–AlGaAs/GaAs Red

Dimension of Width

008–8mm　028–28mm　180–180mm

Dimension of Length

008–8mm　028–28mm　180–180mm

Number of Windows

1–1pcs　2–2pcs...0–10pcs　A–11pcs　F–16pcs

B–Light Bar

B–Bonding Type Product

For Example: BBB–5007SR–A11

Description: Light Bar,12 PCS Windows, 50mmX7mm, AlGaAs/GaAs Red, Common Anode

RELIABILITY TESTS

CLASSIFICATION	TEST ITEM	DESCRIPTION AND TEST CONDITION	REFERENCE STANDARD
ENDURANCE TEST	OPERATION LIFE	To evaluate resistance of the device when it operated at electrical stress	
		Ta=25 ± 2℃	MIL–STD–750:1036
		If=12mA~25mA per segment or	MIL–STD–883:1005
		Ip=80mA/ duty=1/8, PW=1.25mS	JIS C7021:B–1
		Ip=160mA/duty=1/16, PW=1mS	
		Test time=1000HRS(–24HRS, +72HRS)	
	HIGH TEMPERATURE HIGH HUMIDITY STORAGE	To evaluate resistance of the device when it store for a long term at high temperature and high humidity	MIL–STD–202:103B
		Ta=65 ± 5℃　RH=90~95%	JIS C7021:B–11
		Test time=240 ± 2HRS	
	HIGH TEMPERATURE HIGH HUMIDITY REVERSE BIAS	To evaluate resistance of leakage current against long term thermal, humidity and electrical stress	
		Ta=65 ± 5℃　RH=90~95%　VR=5V	
		Test time=500HRS(–24HRS,+48HRS)	
	HIGH TEMPERATURE STORAGE	To evaluate device's durability for long term storage in high temperature	MIL–STD–883:1008
		Ta=85 ± 5℃ (COB:Ta=65 ± 5℃)	JIS C7021:B–10
		Test time=1000HRS(–24HRS, +72HRS)	
	LOW TEMPERATURESTORAGE	To evaluate device's durability for long term storage in low temperature	JIS C7021:B–12
		Ta=–35 ± 5℃	
		Test time=1000HRS(–24HRS, +72HRS)	
ENVIRONMENTAL TEST	TEMPERATURE CYCLING	To evaluate resistance of device under thermal stress, expansion and contraction	
			MIL–STD–202:107D
		85℃~25℃~ –35℃~25℃	MIL–STD–750:1051
		30min　5min　30min　5min	MIL–STD–883:1010
		10cycles(COB: Thot=65℃,　Tcold=–25℃)	JIS C7021:A–4
	THERMAL SHOCK	To evaluate device's structural and mechanical resistance when suddenly exposed at serious changes	MIL–STD–202:107D
		85 ± 5℃~–35 ± 5℃	MIL–STD–750:1051
		10min　10min	MIL–STD–883:1011
		10cycles(COB: Thot=65℃, Tcold=–25℃)	
	SOLDER RESISTANCE	To evaluate resistance of thermal stress caused by soldering	MIL–STD–202:210A
		T.sol=260 ± 5℃	MIL–STD–750:2031
		Dwell time=10 ± 1sec	JIS C7021:A–1
	SOLDERABILITY	To evaluate solder ability on leads of device	MIL–STD–202:208D
		T.sol=230 ± 5℃	MIL–STD–750:2026
		Dwell time=5 ± 1sec	MIL–STD–883:2003
			JIS C7021:A–2

DISPLAY USING INSTRUCTION

CLEANING

If cleaning is necessary, please wipe the pin out with alcohol, Freon TE or Chorosen at normal temperature for less than 1 minute, or wipe the surface with alcohol. Other chemical solutions may harm the surface of display.

SOLDERING

a: Hand Soldering--- 295℃ ± 5℃ in 3 seconds

b: Dip Soldering--- 260℃ ± 5℃ in 5 seconds

c: Automatic Soldering--- Pre-heating 70℃~80℃ in 30 seconds, soldering 245℃±5℃ in 5℃ Seconds.

DRIVING CIRCUIT

a: Recommended Forward Current: 5mA-20mA

b: Need put resistors in application circuit . Resistor values can be determined by supplying voltage .

c: Circuit must be designed so that overvoltage or overcurrent is not applied LED during on/off switching. Transient or pulse current will damage the junction of LED die.

d. When using the pulse drive, care must be taken to keep the average current within the rated Figures.

BRIGHTNESS

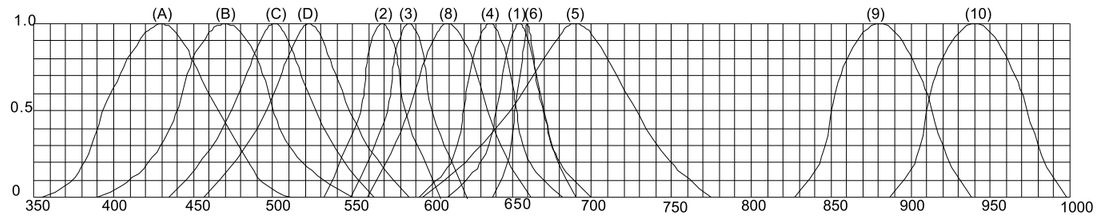
a: For the obtaining even brightness. Each segment should be at the same current, so the best circuit is to supply constant current for each segment.

b: To increase brightness, increase current. But do not over the maximum rating.

ABSOLUTE MAXIMUM RATINGS

Test Condition For Each Parameter and Absolute Maximum Ratings				
Parameter	**Symbol**	**Test Condition**	**Rating**	**Unit**
Reverse Voltage	VR	——	——	V
Reverse Current	IR	VR=5.0V	≤100uA	uA
Forward Voltage	VF	IF=20mA	——	V
Luminous Intensity	IV	IF=10mA	——	mcd
Spectral Line Half-Width	△λ	IF=20mA	——	nm
Power Dissipation	PD	IF=20mA	——	mW
Peak Forward Current (Duty 1/10 1KHZ)	IF(PEAK)	IF(PEAK)=100mA	——	mA
Operating Temperature Range	Topr	——	-40~+80	℃
Storage Temperature Range	Tstg	——	-40~+100	℃

TYPICAL ELECTIEICAL-OPTICAL



(1)-GaAsP/GaAs 655nm/Red

(2)-Gap 568nm/Yellow Green

(3)-GaAsP/GaP 585nm/Yellow

(4)-GaAsP/Gap 635nm/Orange&Hi-Eff Red

(5)-GaP 700/Bright Red

(6)-GaAlAs/GaAs 660nm/Super Red

(8)-GaAsP/GaP 610nm/Super Red

(9)-GaAlAs 880nm

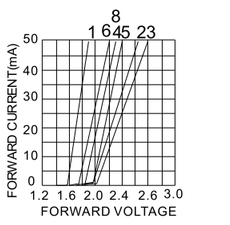
(10)-GaAs/GaAs&GaAlAs/GaAs 940nm

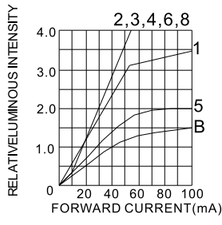
(A)-GaN/SiC 430nm/Blue

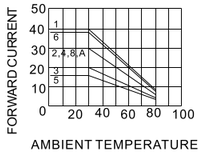
(B)-InGaN/SiC 470nm/Blue

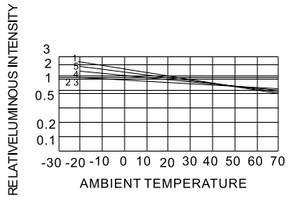
(C)-InGaN/SiC 502nm/Ultra Green

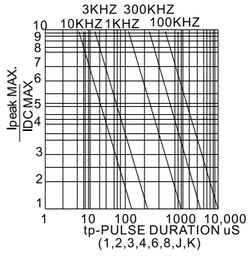
(D)-InGaAl/SiC 523nm/Ultra Green

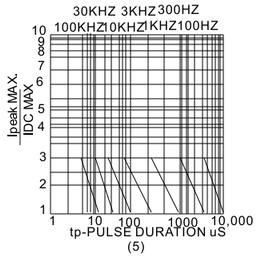












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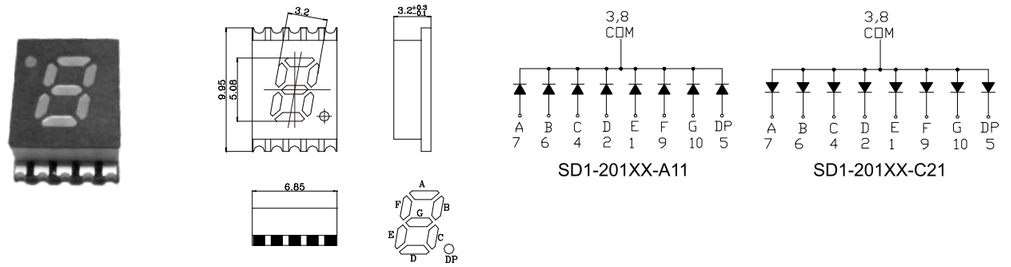
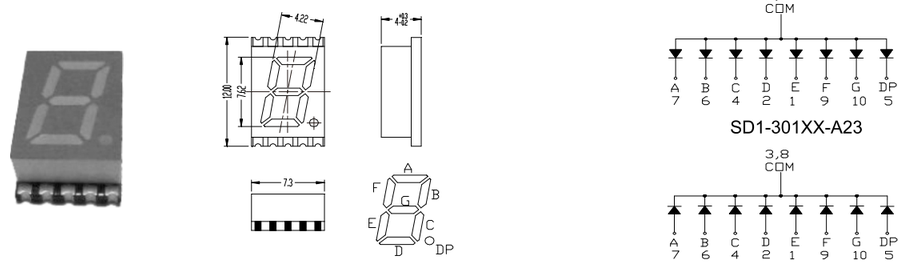
Web: www.interled.com.cn

SINGLE DIGIT SMD DISPLAY

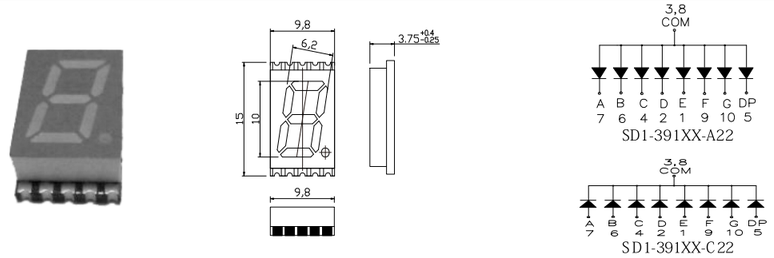
Digit Size	Part No.		Chip	Wave Length λd(nm)	Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Materials/Emmited Color		Vf(Typ.) v	Iv. Typ per Seg. mcd
0.2"	SD1-201HR-A11	SD1-201HR-C11	AlGaInP/ Super-Red Chip	618~625	1.8~2.3	4
	SD1-201YG-A21	SD1-201YG-C21	GaP/ Yellow-Green Chip	568~573	1.8~2.4	1.5
	SD1-201TB-A11	SD1-201TB-C21	InGaN/ Blue Chip	465~475	2.8~3.6	8
SD-01 SD1-201XX-X11						



Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.3"	SD1-301UG-A23	SD1-301UG-C23	AlGaInP/Yellow Green Chip	568~575	1.8~2.2	2.2
	SD1-301HR-A23	SD1-301HR-C23	AlGaInP/Red Chip	618~628	1.8~2.2	8
	SD1-301TB-A23	SD1-301TB-C23	InGaN/Blue Chip	465~475	2.8~3.6	10
SD-02 SD1-301XX-X23						



Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.39"	SD1-391TB-A22	SD1-391TB-C22	InGaN/ Blue Chip	465~475	2.8~3.4	10
	SD1-391PG-A22	SD1-391PG-C22	InGaN/Pure Green Chip	520~530	2.8~3.6	30
	SD1-391S3-A22	SD1-391S3-C22	AlGaInP/ Orange Chip	600~610	1.8~2.4	4
	SD1-391UG-A22	SD1-391UG-C22	AlGaInP/ Yellow Chip	568~575	1.8~2.4	3.5
	SD1-391UR-A22	SD1-391UR-C22	AlGaInP/ Red Chip	628~637	1.8~2.4	3
SD-03 SD1-391XX-X22						



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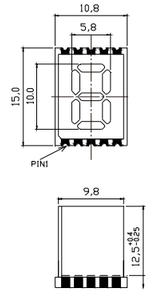
Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Color Temperature CCT(K)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.39"	SD1-394W2-A12H	SD1-394W2-C12H	InGaN/White Chip	6500	2.8~3.4	35
SD-03 SD1-394XX-X12H						



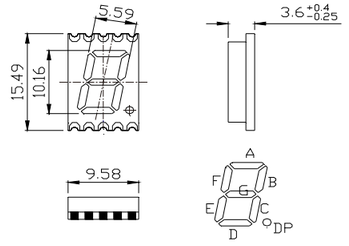


SD1-394XX-A12H

SD1-394XX-C12H

Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.40"	SD1-401UR-A21	SD1-401UR-C21	AlGaInP/Red Chip	628~637	1.8~2.3	3
	SD1-401UG-A21	SD1-401UG-C21	AlGaInP/Red Chip	568~575	1.8~2.3	3.5
	SD1-401TB-A21	SD1-401TB-C21	AlGaInP/Red Chip	465~475	2.8~3.4	10
SD-04 SD1-401XX-X21						



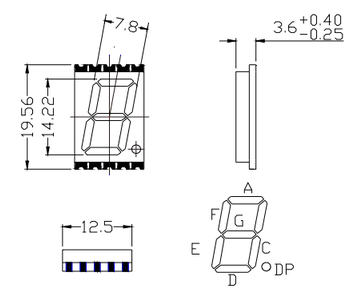


SD1-401XX-A21

SD1-401XX-C21

Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.56"	SD1-561GU-A21	SD1-561GU-C21	GaP/Yellow Green Chip	568~573	1.8~2.4	5
	SD1-561UG-A21	SD1-561UG-C21	AlGaInP/Yellow Green Chip	568~573	1.8~2.4	5
	SD1-561UR-A21	SD1-561UR-C21	AlGaInP/Red Chip	628~637	1.8~2.3	10
	SD1-561TB-A21	SD1-561TB-C21	InGaN/Blue Chip	465~475	1.8~2.3	15
SD-05 SD1-561XX-X21						

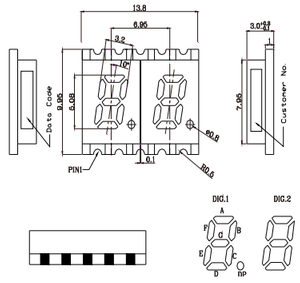


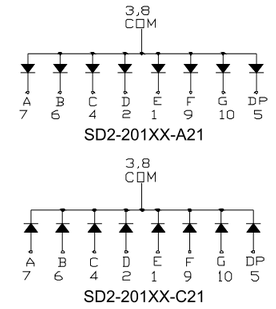


SD1-561XX-A21

Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.20"	SD2-201HR-A21	SD2-201HR-C21	AlGaInP/Red Chip	620-630	1.8~2.3	4
	SD2-201YG-A21	SD2-201YG-C21	GaP/Yellow Green Chip	568~573	1.8~2.4	1.5
	SD2-201TB-A21	SD2-201TB-C21	InGaN/Blue Chip	465~475	2.8~3.6	8
DD-01 SD2-201XX-X21						



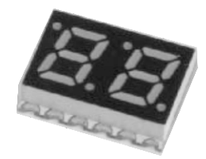


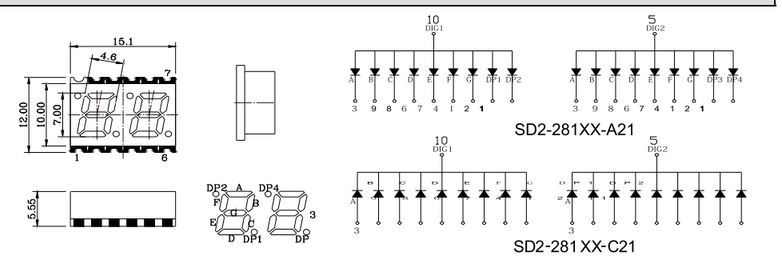


SD2-201XX-A21

SD2-201XX-C21

Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.28"	SD2-281UR-A21	SD2-281UR-C21	AlGaInP/Red Chip	628~637	2.8~3.4	2
	SD2-281UG-A21	SD2-281UG-C21	AlGaInP/Yellow Green Chip	568~573	1.8~2.4	2.2
	SD2-281TB-A21	SD2-201TB-C21	InGaN/Blue Chip	465~475	2.8~3.6	6.8
DD-02 SD2-281XX-X21						



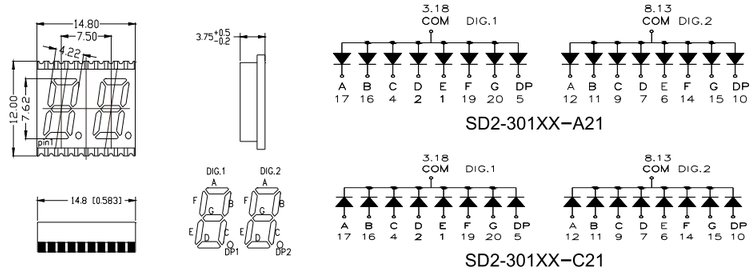


SD2-281XX-A21

SD2-281 XX-C21

Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.3"	SD2-301UR-A21	SD2-301UR-C21	AlGaInP/Red Chip	628~637	1.8~2.4	3.5
	SD2-301UG-A21	SD2-301UG-C21	AlGaInP/Yellow Green Chip	568~575	1.8~2.4	2.5
	SD2-301PG-A21	SD2-301PG-C21	InGaN/Pure Green Chip	520~530	2.8~3.6	30
	SD2-301TB-A21	SD2-301TB-C21	InGaN/Blue Chip	465~475	2.8~3.6	12
DD-03 SD2-301XX-X21						





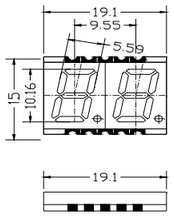
SD2-301XX-A21

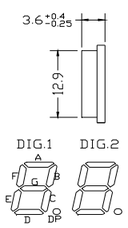
SD2-301XX-C21

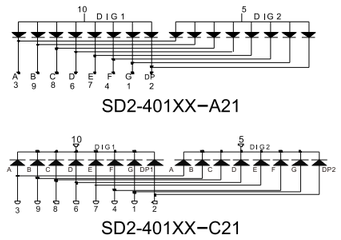
DUAL DIGIT SMD DISPLAY

Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.4"	SD2-401UR-A21	SD2-401UR-C21	AlGaInP/Red Chip	634~644	1.8~2.4	7
	SD2-401TB-A21	SD2-401TB-C21	InGaN/Blue Chip	465~475	2.8~3.6	50
	SD2-401PG-A21	SD2-401PG-C21	InGaN/Pure Green Chip	520~530	2.8~3.6	15
DD-04 SD2-401XX-X21						



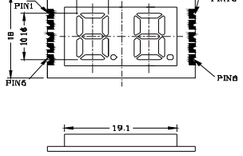


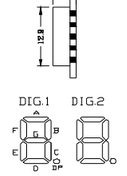


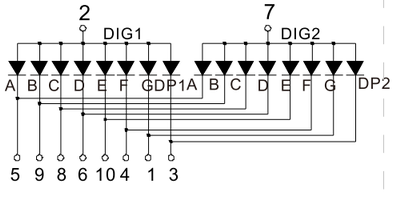


Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Color Temperature CCT(K)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.4"	SD2-401W3-A23	SD2-401W3-C23	InGaN/White Chip	6500	2.8~3.4	120
DD-05 SD2-401XX-X23						

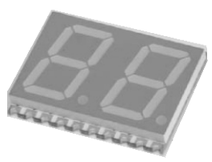


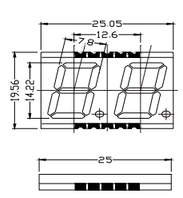


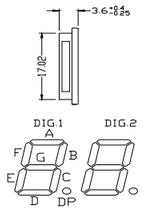


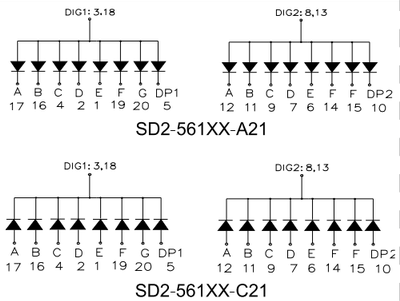


Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.56"	SD2-561UR-A21	SD2-561UR-C21	AlGaInP/Red Chip	628~637	1.8~2.4	10
	SD2-561UG-A21	SD2-561UG-C21	AlGaInP/Yellow Green Chip	568~575	1.8~2.4	4.5
	SD2-561TB-A21	SD2-561TB-C21	InGaN/Blue Chip	465~475	2.8~3.6	15
DD-06 SD2-561XX-X21						



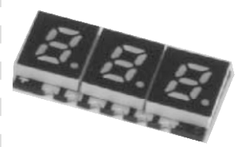


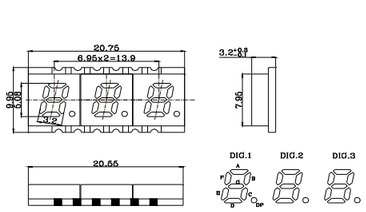


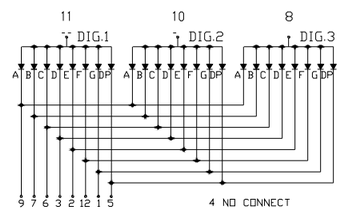


THREE DIGIT SMD DISPLAY

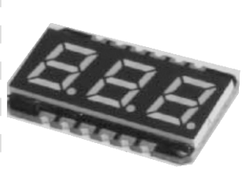
Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.20"	SD3-201UY-A21	SD3-201UY-C21	AlGaInP/Yellow Chip	585~595	1.8~2.4	5
	SD3-201HR-A21	SD3-201HR-C21	AlGaInP/Super Red Chip	618~625	1.8~2.3	4
	SD3-201UG-A21	SD3-201UG-C21	GaP/Yellow Green Chip	568~573	1.8~2.4	1.5
	SD3-201TB-A21	SD3-201TB-C21	InGaN/Blue Chip	465~475	2.8~3.6	8
TD-01 SD3-201XX-X21						

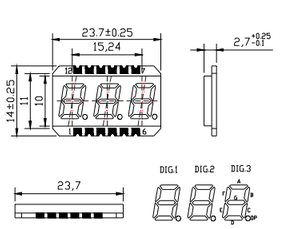


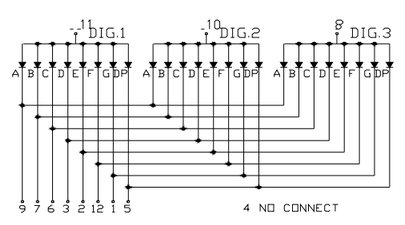




Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Color Temperature CCT(K)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.28"	SD3-284W2-A11	SD3-284W2-C11	InGaN/White Chip	6000	2.8~3.4	45
TD-02 SD3-284XX-X11						

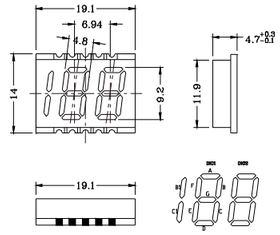


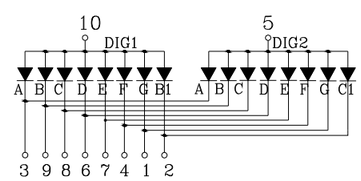




Digit Size	Part No.		Chip		Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v	Iv.Typ perSeg. mcd
0.36"	SD3-361PG-A21	SD3-361PG-C21	InGaN/Green Chip	520~530	2.8~3.4	120
TD-03 SD3-361XX-X21						

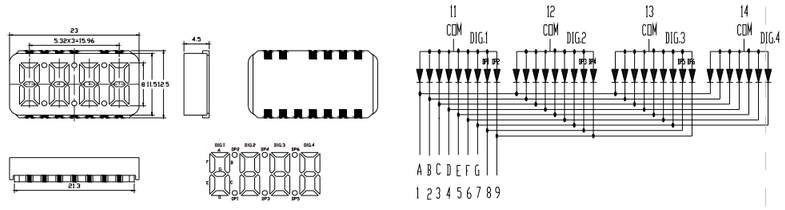






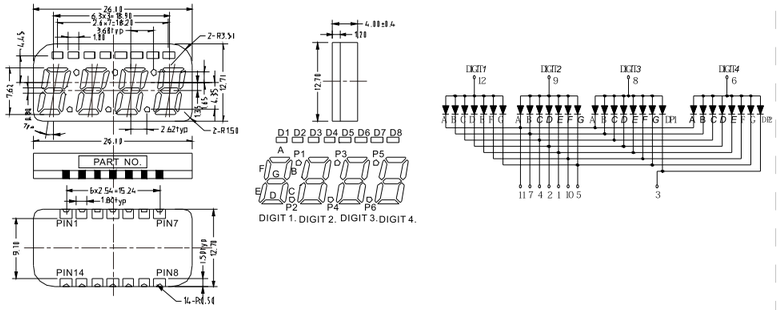
Digit Size	Part No.		Chip	Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v / Iv.Typ perSeg. mcd
0.3"	SD4-301UR-A21	SD4-301UR-C21	AlGaInP/Red Chip	627~637	1.8~2.3 / 3.5
	SD4-301UG-A21	SD4-301UG-C21	AlGaInP/ Yellow Green Chip	568~575	1.8~2.4 / 2.5
	SD4-301PG-A21	SD4-301PG-C21	InGaN/Pure Green Chip	520~530	2.8~3.6 / 30
	SD4-301TB-A21	SD4-301TB-C21	InGaN/Blue Chip	465~475	2.8~3.6 / 12
FD-01 SD4-301XX-X21					





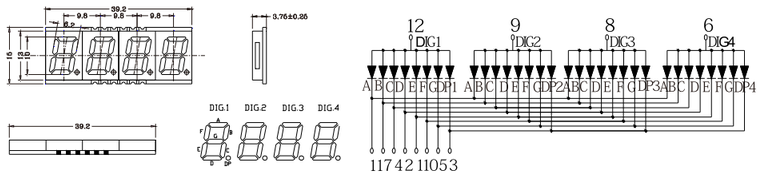
Digit Size	Part No.		Chip	Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v / Iv.Typ perSeg. mcd
0.30"	CE423MZ-A1	CE423MZ-C1	AlGaInP/Red+Green+Yellow Chip	630,570,590	1.8~2.4 / 5,1.5,1.5
FD-02 CE423XX-X1					





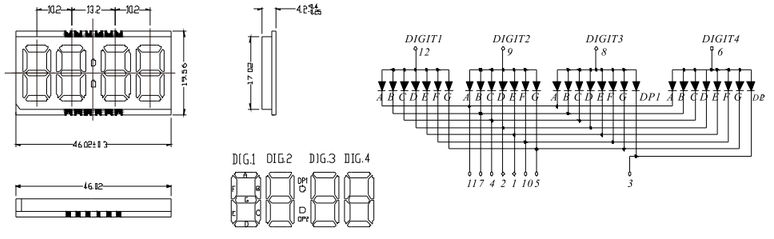
Digit Size	Part No.		Chip	Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v / Iv.Typ perSeg. mcd
0.40"	SD4-401UR-A22	SD4-401UR-C22	AlGaInP/ Red Chip	628~636	1.8~2.4 / 7
	SD4-401W3-A22	SD4-401W3-C22	InGaN/ White Chip	6500	2.8~3.4 / 100
FD-03 SD4-401XX-X22					





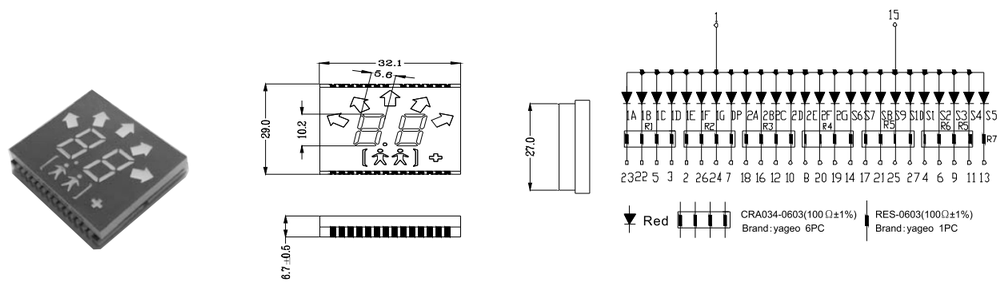
Digit Size	Part No.		Chip	Electro-optical Data(@10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	Vf(Typ.) v / Iv.Typ perSeg. mcd
0.56"	SD4-561W3-A21	SD4-561W3-C21	InGaN/ White Chip	6500	2.8~3.4 / 100
FD-04 SD4-561XX-X21					





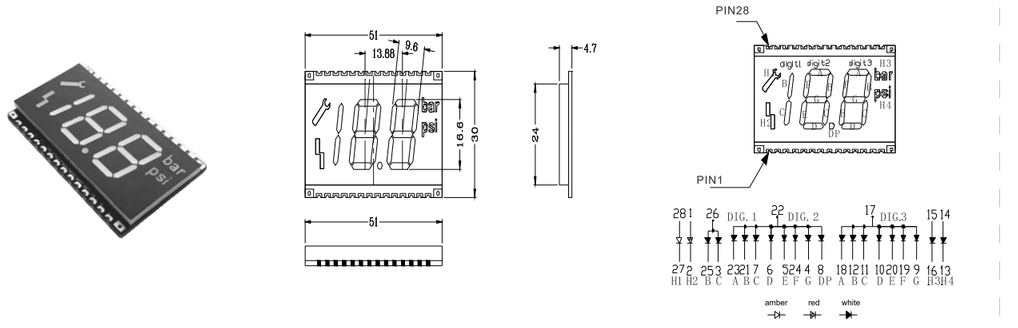
P/N BW501HR-A2N

SMD display, height 0.4", dual didits+multy windows, red color, black surface, white diffused segments, common anode.



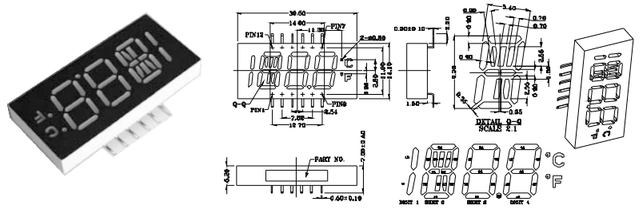
P/N BW510W3-A1

SMD display, height 0.6", dual didits+DP+multy windows, white+red+orange color, black surface, white diffused segments, common anode.



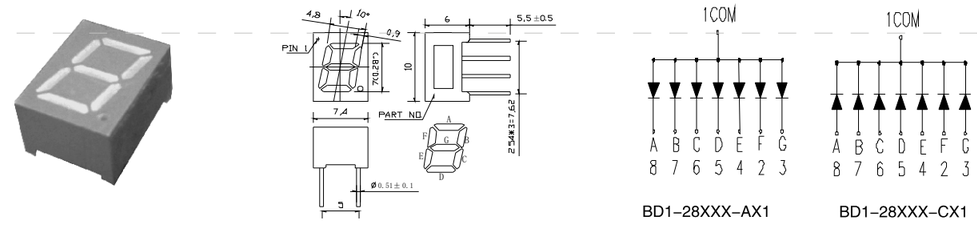
P/N CS007R8-A

SMD display, height 0.36", four didits+2 icons, red color, black surface, white diffused segments, common anode.



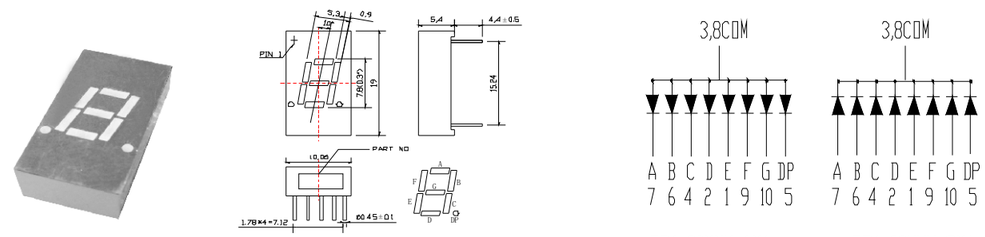
Digit Size	Part No.		Chip		Electro-optical Data (At 10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	VF (V) Typ.	Iv.Typ. Per. Seg. (mcd)
0.28"	BD1-281UB-A11	BD1-281UB-C11	InGaN/SiC Blue Chip	465	3.2	12
	BD1-281PG-A11	BD1-281PG-C11	InGaN/SiC Pure Green Chip	525	3.2	18
	BD1-281GU-A11	BD1-281GU-C11	Gap/Gap Yellow Green Chip	570	2.15	2.5
	BD1-281UG-A11	BD1-281UG-C11	AlInGaP/GaAs Yellow Green Chip	570	2.1	4.5
	BD1-281HY-A11	BD1-281HY-C11	GaAsP/GaP Yellow Chip	590	2.1	1.5
	BD1-281UY-A11	BD1-281UY-C11	AlGaInP/GaAs Yellow Chip	590	2.05	15
	BD1-281YO-A11	BD1-281YO-C11	AlGaInP/GaAs Orange Chip	605	2.05	15
	BD1-281HO-A11	BD1-281HO-C11	GaAsP/GaP Orange Chip	625	2	1.5
	BD1-281UR-A11	BD1-281UR-C11	AlGaInP/GaAs Red Chip	630	1.95	10
	BD1-281SR-A11	BD1-281SR-C11	AlGaAs/GaAs Red Chip	643	1.85	4.5

SD-01 BD1-28XXX-XX1



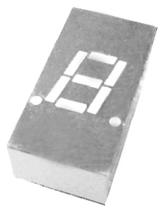
0.3"	BD1-301UB-A11	BD1-301UB-C11	InGaN/SiC Blue Chip	465	3.2	12
	BD1-301PG-A11	BD1-301PG-C11	InGaN/SiC Pure Green Chip	525	3.2	18
	BD1-301GU-A11	BD1-301GU-C11	Gap/Gap Yellow Green Chip	570	2.15	2.5
	BD1-301UG-A11	BD1-301UG-C11	AlInGaP/GaAs Yellow Green Chip	570	2.1	4.5
	BD1-301HY-A11	BD1-301HY-C11	GaAsP/GaP Yellow Chip	590	2.1	1.5
	BD1-301UY-A11	BD1-301UY-C11	AlGaInP/GaAs Yellow Chip	590	2.05	15
	BD1-301YO-A11	BD1-301YO-C11	AlGaInP/GaAs Orange Chip	605	2.05	15
	BD1-301HO-A11	BD1-301HO-C11	GaAsP/GaP Orange Chip	625	2	1.5
	BD1-301UR-A11	BD1-301UR-C11	AlGaInP/GaAs Red Chip	630	1.95	10
	BD1-301SR-A11	BD1-301SR-C11	AlGaAs/GaAs Red Chip	643	1.85	4.5

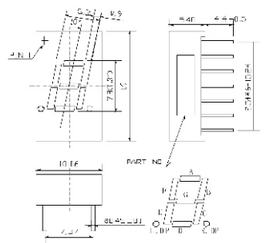
SD-02 BD1-30XXX-XX1

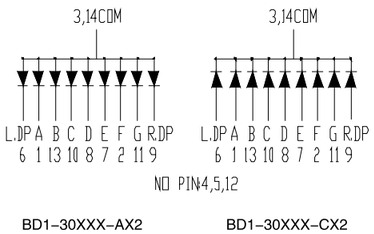


Digit Size	Part No.		Chip		Electro-optical Data (At 10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	VF (V) Typ.	Iv.Typ. Per. Seg. (mcd)
0.3"	BD1-301UB-A12	BD1-301UB-C12	InGaN/SiC Blue Chip	465	3.2	12
	BD1-301PG-A12	BD1-301PG-C12	InGaN/SiC Pure Green Chip	525	3.2	18
	BD1-301GU-A12	BD1-301GU-C12	Gap/Gap Yellow Green Chip	570	2.15	2.5
	BD1-301UG-A12	BD1-301UG-C12	AlInGaP/GaAs Yellow Green Chip	570	2.1	4.5
	BD1-301HY-A12	BD1-301HY-C12	GaAsP/GaP Yellow Chip	590	2.1	1.5
	BD1-301UY-A12	BD1-301UY-C12	AlGaInP/GaAs Yellow Chip	590	2.05	15
	BD1-301YO-A12	BD1-301YO-C12	AlGaInP/GaAs Orange Chip	605	2.05	15
	BD1-301HO-A12	BD1-301HO-C12	GaAsP/GaP Orange Chip	625	2	1.5
	BD1-301UR-A12	BD1-301UR-C12	AlGaInP/GaAs Red Chip	630	1.95	10
	BD1-301SR-A12	BD1-301SR-C12	AlGaAs/GaAs Red Chip	643	1.85	4.5

SD-03 BD1-30XXX-XX2



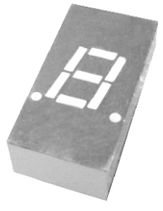


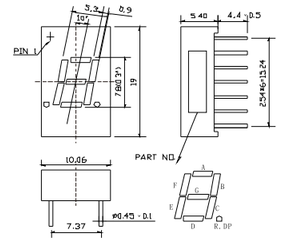


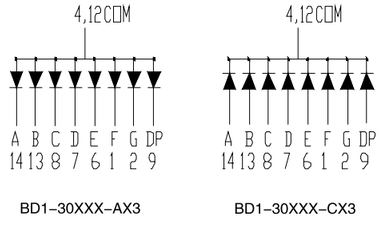
BD1-30XXX-AX2 BD1-30XXX-CX2

0.3"	BD1-301UB-A13	BD1-301UB-C13	InGaN/SiC Blue Chip	465	3.2	12
	BD1-301PG-A13	BD1-301PG-C13	InGaN/SiC Pure Green Chip	525	3.2	18
	BD1-301GU-A13	BD1-301GU-C13	Gap/Gap Yellow Green Chip	570	2.15	2.5
	BD1-301UG-A13	BD1-301UG-C13	AlInGaP/GaAs Yellow Green Chip	570	2.1	4.5
	BD1-301HY-A13	BD1-301HY-C13	GaAsP/GaP Yellow Chip	590	2.1	1.5
	BD1-301UY-A13	BD1-301UY-C13	AlGaInP/GaAs Yellow Chip	590	2.05	15
	BD1-301YO-A13	BD1-301YO-C13	AlGaInP/GaAs Orange Chip	605	2.05	15
	BD1-301HO-A13	BD1-301HO-C13	GaAsP/GaP Orange Chip	625	2	1.5
	BD1-301UR-A13	BD1-301UR-C13	AlGaInP/GaAs Red Chip	630	1.95	10
	BD1-301SR-A13	BD1-301SR-C13	AlGaAs/GaAs Red Chip	643	1.85	4.5

SD-04 BD1-30XXX-XX3



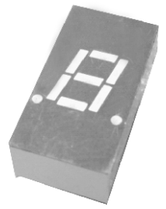


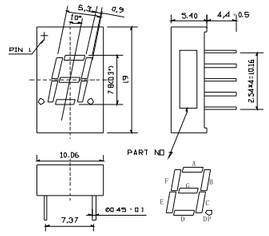


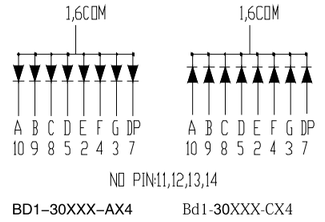
BD1-30XXX-AX3 BD1-30XXX-CX3

Digit Size	Part No.		Chip		Electro-optical Data (At 10mA)	
	Common Anode	Common Cathode	Material/Emitted Color	Wave Length λd(nm)	VF (V) Typ.	Iv.Typ. Per. Seg. (mcd)
0.3"	BD1-301UB-A14	BD1-301UB-C14	InGaN/SiC Blue Chip	465	3.2	12
	BD1-301PG-A14	BD1-301PG-C14	InGaN/SiC Pure Green Chip	525	3.2	18
	BD1-301GU-A14	BD1-301GU-C14	Gap/Gap Yellow Green Chip	570	2.15	2.5
	BD1-301UG-A14	BD1-301UG-C14	AlInGaP/GaAs Yellow Green Chip	570	2.1	4.5
	BD1-301HY-A14	BD1-301HY-C14	GaAsP/GaP Yellow Chip	590	2.1	1.5
	BD1-301UY-A14	BD1-301UY-C14	AlGaInP/GaAs Yellow Chip	590	2.05	15
	BD1-301YO-A14	BD1-301YO-C14	AlGaInP/GaAs Orange Chip	605	2.05	15
	BD1-301HO-A14	BD1-301HO-C14	GaAsP/GaP Orange Chip	625	2	1.5
	BD1-301UR-A14	BD1-301UR-C14	AlGaInP/GaAs Red Chip	630	1.95	10
	BD1-301SR-A14	BD1-301SR-C14	AlGaAs/GaAs Red Chip	643	1.85	4.5

SD-05 BD1-30XXX-XX4



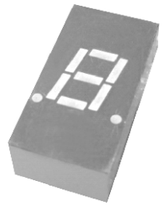


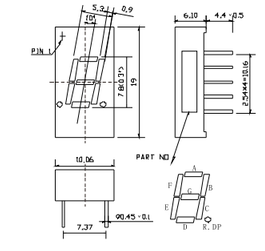


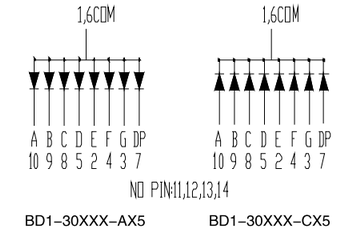
BD1-30XXX-AX4 Bd1-30XXX-CX4

0.3"	BD1-301UB-A15	BD1-301UB-C15	InGaN/SiC Blue Chip	465	3.2	12
	BD1-301PG-A15	BD1-301PG-C15	InGaN/SiC Pure Green Chip	525	3.2	18
	BD1-301GU-A15	BD1-301GU-C15	Gap/Gap Yellow Green Chip	570	2.15	2.5
	BD1-301UG-A15	BD1-301UG-C15	AlInGaP/GaAs Yellow Green Chip	570	2.1	4.5
	BD1-301HY-A15	BD1-301HY-C15	GaAsP/GaP Yellow Chip	590	2.1	1.5
	BD1-301UY-A15	BD1-301UY-C15	AlGaInP/GaAs Yellow Chip	590	2.05	15
	BD1-301YO-A15	BD1-301YO-C15	AlGaInP/GaAs Orange Chip	605	2.05	15
	BD1-301HO-A15	BD1-301HO-C15	GaAsP/GaP Orange Chip	625	2	1.5
	BD1-301UR-A15	BD1-301UR-C15	AlGaInP/GaAs Red Chip	630	1.95	10
	BD1-301SR-A15	BD1-301SR-C15	AlGaAs/GaAs Red Chip	643	1.85	4.5

SD-06 BD1-30XXX-XX5







BD1-30XXX-AX5 BD1-30XXX-CX5