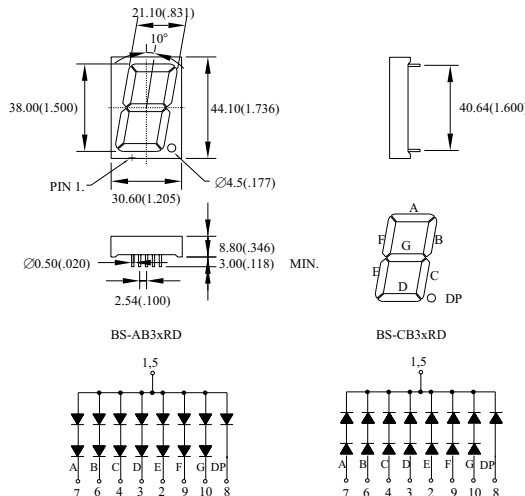
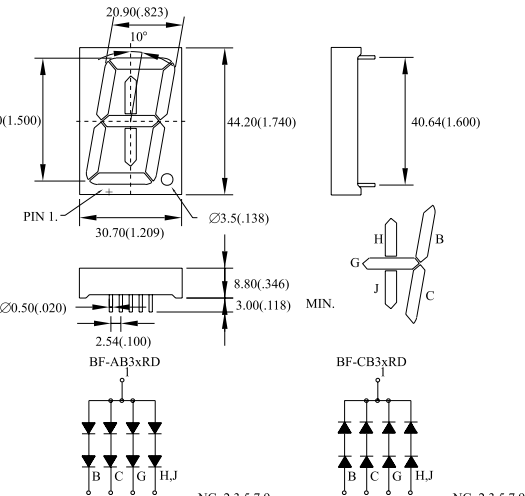
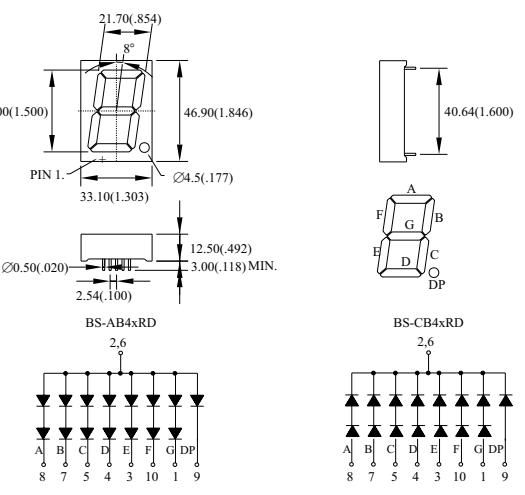
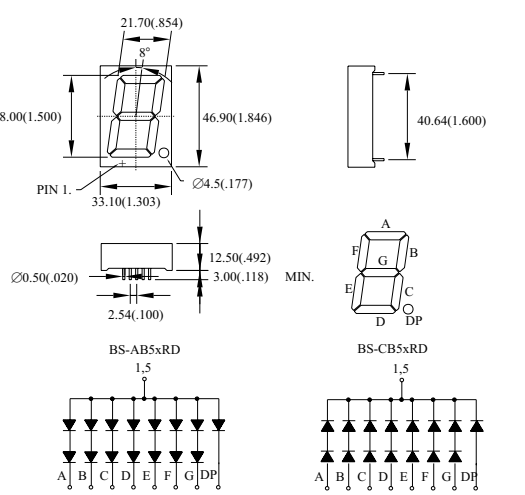
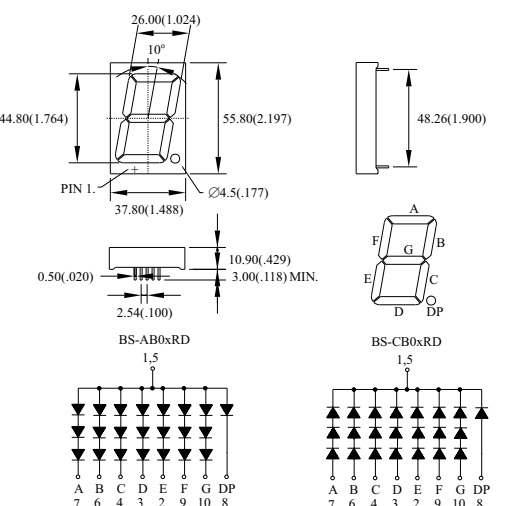
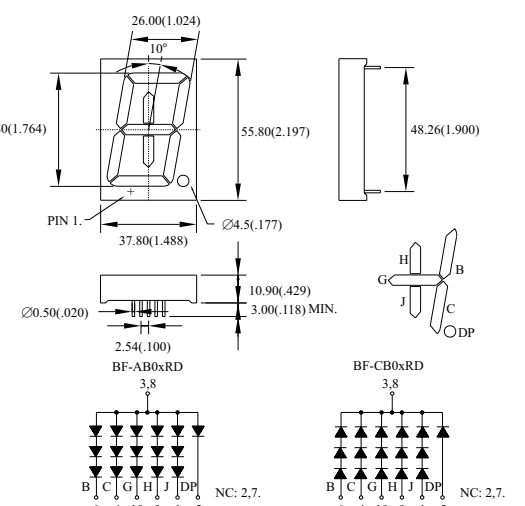


Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length λ_p (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.50" Single-Digit	BS-AB31RD	BS-CB31RD	GaAsP/Red	655	40	160	40	200	3.4	4.0	2.5	SD-49
	BS-AB35RD	BS-CB35RD	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	
	BS-AB35RE	BS-CB35RE										
	BS-AB32RD	BS-CB32RD	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	BS-AB33RD	BS-CB33RD	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	BS-AB34RD	BS-CB34RD	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
			GaAsP/GaP/ Orange									
BS-AB36RD	BS-CB36RD	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0		
BS-AB3FRD	BS-CB3FRD	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0		
1.50" Overflow Single-Digit	BF-AB31RD	BF-CB31RD	GaAsP/Red	655	40	160	40	200	3.4	4.0	2.5	SD-50
	BF-AB35RD	BF-CB35RD	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	
	BF-AB35RE	BF-CB35RE										
	BF-AB32RD	BF-CB32RD	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	BF-AB33RD	FS-CB33RD	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	BF-AB34RD	BF-CB34RD	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
			GaAsP/GaP/ Orange									
BF-AB36RD	BF-CB36RD	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0		
BF-AB3FRD	BF-CB3FRD	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0		
1.50" Single-Digit	BS-AB41RD	BS-CB41RD	GaAsP/Red	655	40	160	40	200	3.4	4.0	2.5	SD-51
	BS-AB45RD	BS-CB45RD	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	
	BS-AB45RE	BS-CB45RE										
	BS-AB42RD	BS-CB42RD	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	BS-AB43RD	BS-CB43RD	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	BS-AB44RD	BS-CB44RD	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
			GaAsP/GaP/ Orange									
	BS-AB46RD	BS-CB46RD	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
	BS-AB4FRD	BS-CB4FRD	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0	
	1.50" Single-Digit	BS-AB51RD	BS-CB51RD	GaAsP/Red	655	40	160	40	200	3.4	4.0	
BS-AB55RD		BS-CB55RD	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	
BS-AB55RE		BS-CB55RE										
BS-AB52RD		BS-CB52RD	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
BS-AB53RD		BS-CB53RD	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
BS-AB54RD		BS-CB54RD	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
			GaAsP/GaP/ Orange									
BS-AB56RD		BS-CB56RD	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
BS-AB5FRD	BS-CB5FRD	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0		
1.80" Single-Digit	BS-AB01RD	BS-CB01RD	GaAsP/Red	655	40	240	40	200	5.1	6.0	4.5	SD-53
	BS-AB05RD	BS-CB05RD	GaP/ Bright Red	700	90	120	15	50	6.6	7.5	5.5	
	BS-AB05RE	BS-CB05RE										
	BS-AB02RD	BS-CB02RD	GaP/ Green	568	30	240	30	150	6.6	7.5	7.0	
	BS-AB03RD	BS-CB03RD	GaAsP/GaP/ Yellow	585	35	240	30	150	6.3	7.5	6.0	
	BS-AB04RD	BS-CB04RD	GaAsP/GaP/ Hi-Eff.Red	635	45	240	30	150	6.0	7.5	7.0	
			GaAsP/GaP/ Orange									
BS-AB06RD	BS-CB06RD	GaAlAs/ SH Super Red	660	20	240	30	150	5.1	7.5	12.0		
BS-AB0FRD	BS-CB0FRD	GaAlAs/ DDH Super Red	660	20	240	30	150	6.0	7.5	17.0		
1.80" Overflow Single-Digit	BF-AB01RD	BF-CB01RD	GaAsP/Red	655	40	240	40	200	5.1	6.0	4.5	SD-54
	BF-AB05RD	BF-CB05RD	GaP/ Bright Red	700	90	120	15	50	6.6	7.5	5.5	
	BF-AB05RE	BF-CB05RE										
	BF-AB02RD	BF-CB02RD	GaP/ Green	568	30	240	30	150	6.6	7.5	7.0	
	BF-AB03RD	BF-CB03RD	GaAsP/GaP/ Yellow	585	35	240	30	150	6.3	7.5	6.0	
	BF-AB04RD	BF-CB04RD	GaAsP/GaP/ Hi-Eff.Red	635	45	240	30	150	6.0	7.5	7.0	
			GaAsP/GaP/ Orange									
BF-AB06RD	BF-CB06RD	GaAlAs/ SH Super Red	660	20	240	30	150	5.1	7.5	12.0		
BF-AB0FRD	BF-CB0FRD	GaAlAs/ DDH Super Red	660	20	240	30	150	6.0	7.5	17.0		

SD-49 BS- $\overset{A}{\underset{C}{\text{B}}}$ 3xRD	SD-50 BF- $\overset{A}{\underset{C}{\text{B}}}$ 3xRD
 <p>SD-49 BS-$\overset{A}{\underset{C}{\text{B}}}$3xRD dimensions: 38.00(1.500) height, 21.10(.831) width, 10° angle, 44.10(1.736) depth, 30.60(1.205) base width, PIN 1. diameter $\varnothing 4.5(1.177)$, 8.80(.346) pin height, 3.00(.118) pin spacing, 2.54(.100) pin width, $\varnothing 0.50(0.020)$ pin diameter. Pinouts: BS-AB3xRD (A, B, C, D, E, F, G, DP) and BS-CB3xRD (A, B, C, D, E, F, G, DP).</p>	 <p>SD-50 BF-$\overset{A}{\underset{C}{\text{B}}}$3xRD dimensions: 38.00(1.500) height, 20.90(.823) width, 10° angle, 44.20(1.740) depth, 30.70(1.209) base width, PIN 1. diameter $\varnothing 3.5(1.138)$, 8.80(.346) pin height, 3.00(.118) pin spacing, 2.54(.100) pin width, $\varnothing 0.50(0.020)$ pin diameter. Pinouts: BF-AB3xRD (B, C, G, H, J) and BF-CB3xRD (B, C, G, H, J). NC: 2,3,5,7,9.</p>
SD-51 BS- $\overset{A}{\underset{C}{\text{B}}}$ 4xRD	SD-52 BS- $\overset{A}{\underset{C}{\text{B}}}$ 5xRD
 <p>SD-51 BS-$\overset{A}{\underset{C}{\text{B}}}$4xRD dimensions: 38.00(1.500) height, 21.70(.854) width, 8° angle, 46.90(1.846) depth, 33.10(1.303) base width, PIN 1. diameter $\varnothing 4.5(1.177)$, 12.50(.492) pin height, 3.00(.118) pin spacing, 2.54(.100) pin width, $\varnothing 0.50(0.020)$ pin diameter. Pinouts: BS-AB4xRD (A, B, C, D, E, F, G, DP) and BS-CB4xRD (A, B, C, D, E, F, G, DP).</p>	 <p>SD-52 BS-$\overset{A}{\underset{C}{\text{B}}}$5xRD dimensions: 38.00(1.500) height, 21.70(.854) width, 8° angle, 46.90(1.846) depth, 33.10(1.303) base width, PIN 1. diameter $\varnothing 4.5(1.177)$, 12.50(.492) pin height, 3.00(.118) pin spacing, 2.54(.100) pin width, $\varnothing 0.50(0.020)$ pin diameter. Pinouts: BS-AB5xRD (A, B, C, D, E, F, G, DP) and BS-CB5xRD (A, B, C, D, E, F, G, DP).</p>
SD-53 BS- $\overset{A}{\underset{C}{\text{B}}}$ 0xRD	SD-54 BF- $\overset{A}{\underset{C}{\text{B}}}$ 0xRD
 <p>SD-53 BS-$\overset{A}{\underset{C}{\text{B}}}$0xRD dimensions: 44.80(1.764) height, 26.00(1.024) width, 10° angle, 55.80(2.197) depth, 37.80(1.488) base width, PIN 1. diameter $\varnothing 4.5(1.177)$, 10.90(.429) pin height, 3.00(.118) pin spacing, 2.54(.100) pin width, $\varnothing 0.50(0.020)$ pin diameter. Pinouts: BS-AB0xRD (A, B, C, D, E, F, G, DP) and BS-CB0xRD (A, B, C, D, E, F, G, DP).</p>	 <p>SD-54 BF-$\overset{A}{\underset{C}{\text{B}}}$0xRD dimensions: 44.80(1.764) height, 26.00(1.024) width, 10° angle, 55.80(2.197) depth, 37.80(1.488) base width, PIN 1. diameter $\varnothing 4.5(1.177)$, 10.90(.429) pin height, 3.00(.118) pin spacing, 2.54(.100) pin width, $\varnothing 0.50(0.020)$ pin diameter. Pinouts: BF-AB0xRD (B, C, G, H, J, DP) and BF-CB0xRD (B, C, G, H, J, DP). NC: 2,7.</p>

NOTES: 1.All Dimensions are in millimeters(inches).
3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25\text{mm}(0.010'')$.
4.NP:No Pin. 5.NC:No Connect.