



Dual Digit LED Displays BD-A/C, BD-E/F Series

7-segment

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.		
0.30" Dual-Digit	BD-E311RD	BD-F311RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.5	DD-07
	BD-E315RD	BD-F315RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.0	
	BD-E315RE	BD-F315RE										
	BD-E312RD	BD-F312RD	GaP/ Green	568	30	80	30	150	2.2	2.5	2.5	
	BD-E313RD	BD-F313RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BD-E314RD	BD-F314RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.5	
			GaAsP/GaP/ Orange									
	BD-E316RD	BD-F316RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	5.0	
BD-E31DRD	BD-F31DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	6.0		
0.36" Dual-Digit	BD-E321RD	BD-F321RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	DD-08
	BD-E325RD	BD-F325RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BD-E325RE	BD-F325RE										
	BD-E322RD	BD-F322RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BD-E323RD	BD-F323RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BD-E324RD	BD-F324RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BD-E326RD	BD-F326RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BD-E32DRD	BD-F32DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.39" Dual-Digit	BD-A431ND	BD-C431ND	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.8	DD-09
	BD-A435ND	BD-C435ND	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BD-A435ND	BD-C435ND										
	BD-A432ND	BD-C432ND	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BD-A433ND	BD-C433ND	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BD-A434ND	BD-C434ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BD-A436ND	BD-C436ND	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
BD-A43DND	BD-C43DND	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.40" Dual-Digit	BD-A401ND	BD-C401ND	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.8	DD-10
	BD-A405ND	BD-C405ND	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BD-A405NE	BD-C405NE										
	BD-A402ND	BD-C402ND	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BD-A403ND	BD-C403ND	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BD-A404NE	BD-C404NE	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BD-A406ND	BD-C406ND	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
BD-A40DND	BD-C40DND	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.40" Dual-Digit	BD-A401ND-A	BD-C401ND-A	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.8	DD-11
	BD-A405ND-A	BD-C405ND-A	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BD-A405NE-A	BD-C405NE-A										
	BD-A402ND-A	BD-C402ND-A	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BD-A403ND-A	BD-C403ND-A	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BD-A404NE-A	BD-C404NE-A	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BD-A406ND-A	BD-C406ND-A	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	BD-A40DND-A	BD-C40DND-A	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	
	BD-E401RD	BD-F401RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.8	DD-12
	BD-E405RD	BD-F405RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BD-E405RE	BD-F405RE										
	BD-E402RD	BD-F402RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BD-E403RD	BD-F403RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BD-E404RD	BD-F404RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
BD-E406RD	BD-F406RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5		
BD-E40DRD	BD-F40DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		



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DD-07 BD-$\frac{E}{F}$ 31xRD Top view dimensions: 16.70(.657) x 16.00(.630). Pin 1 location: 7.62(.300) from left edge, 3.60(.142) from top edge. Pin pitch: 2.54(.100). Pin 10 and 5 locations are marked. Pin connections: A(3), B(9), C(8), D(6), E(7), F(4), G(1), DP(2). Side view dimensions: 10.16(.400) height. Pin 10 and 5 locations are marked. Pin connections: A(3), B(9), C(8), D(6), E(7), F(4), G(1), DP(2).	DD-08 BD-$\frac{E}{F}$ 32xRD Top view dimensions: 15.0(.591) x 14.0(.551). Pin 1 location: 9.2(.362) from left edge, 4.8(.189) from top edge. Pin pitch: 2.54x4=10.16(.40). Pin 10 and 5 locations are marked. Pin connections: A(3), B(9), C(8), D(6), E(7), F(4), G(1), DP(2). Side view dimensions: 10.16(.40) height. Pin 10 and 5 locations are marked. Pin connections: A(3), B(9), C(8), D(6), E(7), F(4), G(1), DP(2).
DD-09 BD-$\frac{A}{C}$ 43xND Top view dimensions: 22.00(.866) x 16.00(.630). Pin 1 location: 10.00(.394) from left edge, 5.80(.228) from top edge. Pin pitch: 2.54(.100). Pin 4 and 5 locations are marked. Pin connections: A(15), B(13), C(1), D(3), E(2), F(14), G(16), DP(12), A(6), B(7), C(11), D(9). Side view dimensions: 12.7(.500) height. Pin 4 and 5 locations are marked. Pin connections: A(15), B(13), C(1), D(3), E(2), F(14), G(16), DP(12), A(6), B(7), C(11), D(9).	DD-10 BD-$\frac{A}{C}$ 40xND Top view dimensions: 20.20(.795) x 16.00(.630). Pin 1 location: 10.16(.400) from left edge, 5.90(.232) from top edge. Pin pitch: 2.54x7=17.78(.100x7=.700). Pin 4 and 5 locations are marked. Pin connections: A(15), B(13), C(1), D(3), E(2), F(14), G(16), DP(12), A(6), B(7), C(11), D(9). Side view dimensions: 12.7(.500) height. Pin 4 and 5 locations are marked. Pin connections: A(15), B(13), C(1), D(3), E(2), F(14), G(16), DP(12), A(6), B(7), C(11), D(9).
DD-11 BD-$\frac{A}{C}$ 40xND-A Top view dimensions: 20.10(.791) x 16.00(.630). Pin 1 location: 10.20(.402) from left edge, 5.90(.232) from top edge. Pin pitch: 2.54x7=17.78(.100x7=.700). Pin 4 and 5 locations are marked. Pin connections: A(15), B(13), C(1), D(3), E(2), F(14), G(16), DP(12), A(6), B(7), C(11), D(9). Side view dimensions: 12.7(.500) height. Pin 4 and 5 locations are marked. Pin connections: A(15), B(13), C(1), D(3), E(2), F(14), G(16), DP(12), A(6), B(7), C(11), D(9).	DD-12 BD-$\frac{E}{F}$ 40xRD Top view dimensions: 20.20(.795) x 16.00(.630). Pin 1 location: 10.16(.400) from left edge, 5.90(.232) from top edge. Pin pitch: 2.54(.100). Pin 10 and 5 locations are marked. Pin connections: A(3), B(9), C(8), D(6), E(7), F(4), G(1), DP(2). Side view dimensions: 12.7(.500) height. Pin 10 and 5 locations are marked. Pin connections: A(3), B(9), C(8), D(6), E(7), F(4), G(1), DP(2).

NOTES: 1.All Dimensions are in millimeters(.010").

3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25\text{mm}(.010")$.

4.NP:No Pin. 5.NC:No Connect.

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