



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

16-segment, ± 1 overflow, 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.		
0.52" Dual-Digit	BD-A531RD	BD-C531RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.8	DD-19
	BD-A535RD	BD-C535RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BD-A535RE	BD-C535RE										
	BD-A532RD	BD-C532RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BD-A533RD	BD-C533RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BD-A534RD	BD-C534RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BD-A536RD	BD-C536RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
BD-A53DRD	BD-C53DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.54" Alpha-Numeric Displays	BD-E521RD	BD-F521RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.8	DD-20
	BD-E525RD	BD-F525RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BD-E525RE	BD-F525RE										
	BD-E522RD	BD-F522RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BD-E523RD	BD-F523RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BD-E524RD	BD-F524RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BD-E526RD	BD-F526RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
BD-E52DRD	BD-F52DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.56" Dual-Digit	BD-A511RD	BD-C511RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.8	DD-21
	BD-A515RD	BD-C515RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BD-A515RE	BD-C515RE										
	BD-A512RD	BD-C512RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BD-A513RD	BD-C513RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BD-A514RE	BD-C514RE	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BD-A516RD	BD-C516RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
BD-A51DRD	BD-C51DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.56" Overflow Dual-Digit	BG-A511RD	BG-C511RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.9	DD-22
	BG-A515RD	BG-C515RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	
	BG-A515RE	BG-C515RE										
	BG-A512RD	BG-C512RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8	
	BG-A513RD	BG-C513RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8	
	BG-A514RE	BG-C514RE	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6	
			GaAsP/GaP/ Orange									
	BG-A516RD	BG-C516RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8	
BG-A51DRD	BG-C51DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8		
0.56" Dual-Digit	BD-A541RD	BD-C541RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.9	DD-23
	BD-A545RD	BD-C545RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	
	BD-A545RE	BD-C545RE										
	BD-A542RD	BD-C542RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8	
	BD-A543RD	BD-C543RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8	
	BD-A544RE	BD-C544RE	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6	
			GaAsP/GaP/ Orange									
	BD-A546RD	BD-C546RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8	
	BD-A54DRD	BD-C54DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8	
	BD-E541RD-A	BD-F541RD-A	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.9	DD-24
	BD-E545RD-A	BD-F545RD-A	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	
	BD-E545RE-A	BD-F545RE-A										
	BD-E542RD-A	BD-F542RD-A	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8	
	BD-E543RD-A	BD-F543RD-A	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8	
	BD-E544RE-A	BD-F544RE-A	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6	
			GaAsP/GaP/ Orange									
BD-E546RD-A	BD-F546RD-A	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8		
BD-E54DRD-A	BD-F54DRD-A	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8		



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DD-19 BD-$\frac{A}{C}$53xRD Technical drawing of the DD-19 display showing top, side, and pin views. Dimensions include 7.60(.299) for segment height, 13.20(.520) for overall height, 25.00(.984) for width, and 15.24(.600) for depth. Pin 1 is indicated. Segment labels A through DP are shown in the pin view.	DD-20 BD-$\frac{E}{F}$52xRD Technical drawing of the DD-20 display showing top, side, and pin views. Dimensions include 8.16(.321) for segment height, 13.80(.543) for overall height, 25.20(.992) for width, and 15.24(.600) for depth. Pin 1 is indicated. Segment labels A through DP are shown in the pin view.
DD-21 BD-$\frac{A}{C}$51xRD Technical drawing of the DD-21 display showing top, side, and pin views. Dimensions include 8.10(.315) for segment height, 14.20(.560) for overall height, 25.00(.984) for width, and 15.24(.600) for depth. Pin 1 is indicated. Segment labels A through DP are shown in the pin view.	DD-22 BG-$\frac{A}{C}$51xRD Technical drawing of the DD-22 display showing top, side, and pin views. Dimensions include 8.10(.315) for segment height, 14.20(.560) for overall height, 25.00(.984) for width, and 15.24(.600) for depth. Pin 1 is indicated. Segment labels A through DP are shown in the pin view.
DD-23 BD-$\frac{A}{C}$54xRD Technical drawing of the DD-23 display showing top, side, and pin views. Dimensions include 8.00(.315) for segment height, 14.20(.560) for overall height, 25.00(.984) for width, and 15.24(.600) for depth. Pin 1 is indicated. Segment labels A through DP are shown in the pin view.	DD-24 BD-$\frac{E}{F}$54xRD-A Technical drawing of the DD-24 display showing top, side, and pin views. Dimensions include 8.00(.315) for segment height, 14.20(.560) for overall height, 25.00(.984) for width, and 15.24(.600) for depth. Pin 1 is indicated. Segment labels A through DP are shown in the pin view.

NOTES: 1.All Dimensions are in millimeters(inches).

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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