



Single Digit LED Displays BS-A/C, BF-U Series

7-segment, ± 1 overflow

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.		
0.28" Single Digit	BS-A281ND	BS-C281ND	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	SD-01
	BS-A285ND	BS-C285ND	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BS-A285NE	BS-C285NE										
	BS-A282ND	BS-C282ND	GaP/ Green	568	30	80	30	150	2.2	2.5	2.8	
	BS-A283ND	BS-C283ND	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	BS-A284ND	BS-C284ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.8	
		GaAsP/GaP/ Orange										
	BS-A286ND	BS-C286ND	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	5.0	
	BS-A28DND	BS-C28DND	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BS-A281RD-A	BS-C281RD-A	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	SD-02
	BS-A285RD-A	BS-C285RD-A	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BS-A285RE-A	BS-C285RE-A										
	BS-A282RD-A	BS-C282RD-A	GaP/ Green	568	30	80	30	150	2.2	2.5	2.8	
	BS-A283RD-A	BS-C283RD-A	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	BS-A284RD-A	BS-C284RD-A	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.8	
		GaAsP/GaP/ Orange										
	BS-A286RD-A	BS-C286RD-A	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	5.0	
	BS-A28DRD-A	BS-C28DRD-A	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BS-A281RD-B	BS-C281RD-B	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	SD-03
	BS-A285RD-B	BS-C285RD-B	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BS-A285RE-B	BS-C285RE-B										
	BS-A282RD-B	BS-C282RD-B	GaP/ Green	568	30	80	30	150	2.2	2.5	2.8	
	BS-A283RD-B	BS-C283RD-B	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	BS-A284RD-B	BS-C284RD-B	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.8	
		GaAsP/GaP/ Orange										
	BS-A286RD-B	BS-C286RD-B	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	5.0	
	BS-A28DRD-B	BS-C28DRD-B	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	6.0	
0.3" Single- Digit	BS-A301RD	BS-C301RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	SD-04
	BS-A305RD	BS-C305RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BS-A305RE	BS-C305RE										
	BS-A302RD	BS-C302RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BS-A303RD	BS-C303RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BS-A304RD	BS-C304RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
		GaAsP/GaP/ Orange										
	BS-A306RD	BS-C306RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BS-A30DRD	BS-C30DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	BS-A301RD-A	BS-C301RD-A	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	SD-05
	BS-A305RD-A	BS-C305RD-A	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BS-A305RE-A	BS-C305RE-A										
	BS-A302RD-A	BS-C302RD-A	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BS-A303RD-A	BS-C303RD-A	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BS-A304RD-A	BS-C304RD-A	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
		GaAsP/GaP/ Orange										
	BS-A306RD-A	BS-C306RD-A	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BS-A30DRD-A	BS-C30DRD-A	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0	
0.3" Overflow Single-Digit	BF-U301RD		GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	SD-06
	BF-U305RD		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BF-U305RE											
	BF-U302RD		GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BF-U303RD		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BF-U304RD		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
		GaAsP/GaP/ Orange										
	BF-U306RD		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BF-U30DRD		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



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7-segment, ± 1 overflow

SD-01 BS-A_C28xND Top view dimensions: 4.00(.157)mm, 8.20(.323)mm, 7.10(.280)mm, 9.90(.390)mm, 8.00(.315)mm, 0.50(.020)mm, 0.25(.010)mm, 5.40(.212)mm, 6.00(.236)mm, 3.00(.118)mm MIN. Pinout diagram: A, B, C, D, E, F, G, DP. Pin numbers: 8, 7, 6, 5, 4, 3, 2, 1.	SD-02 BS-A_C28xRD-A Top view dimensions: 4.00(.157)mm, 8.20(.323)mm, 7.10(.280)mm, 9.90(.390)mm, 8.00(.315)mm, 0.50(.020)mm, 0.30(.012)mm, 6.10(.240)mm, 3.00(.118)mm MIN. Pinout diagram: A, B, C, D, E, F, G, DP. Pin numbers: 7, 6, 4, 2, 1, 10, 9, 5.
SD-03 BS-A_C28xRD-B Top view dimensions: 4.85(.191)mm, 7.40(.291)mm, 7.00(.276)mm, 10.00(.394)mm, 7.40(.291)mm, 0.50(.0196)mm, 5.08(.20)mm, 6.10(.240)mm, 3.5 ± 0.5(.1383.5 ± 0.2)mm MIN. Pinout diagram: A, B, C, D, E, F, G, DP. Pin numbers: 7, 6, 4, 2, 1, 10, 9, 5.	SD-04 BS-A_C30xRD Top view dimensions: 5.20(.205)mm, 10.10(.394)mm, 7.62(.300)mm, 19.00(.748)mm, 10.10(.394)mm, 7.62(.300)mm, 0.50(.020)mm, 6.10(.240)mm, 3.00(.118)mm MIN. Pinout diagram: A, B, C, D, E, F, G, DP. Pin numbers: 6, 1, 13, 10, 8, 7, 2, 11, 9.
SD-05 BS-A_C30xRD-A Top view dimensions: 5.10(.201)mm, 10.10(.394)mm, 7.62(.300)mm, 19.00(.748)mm, 10.10(.394)mm, 7.62(.300)mm, 0.50(.020)mm, 5.20(.205)mm, 3.00(.118)mm MIN. Pinout diagram: A, B, C, D, E, F, G, DP. Pin numbers: 6, 1, 13, 10, 8, 7, 2, 11, 9.	SD-06 BF-U30xRD Top view dimensions: 5.10(.201)mm, 10.10(.394)mm, 7.62(.300)mm, 19.00(.748)mm, 10.10(.394)mm, 7.62(.300)mm, 0.50(.020)mm, 5.20(.205)mm, 3.00(.118)mm MIN. Pinout diagram: A, B, C, D, E, F, G, DP. Pin numbers: 13, 12, 11, 6, 5, 3, 4, 10.

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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