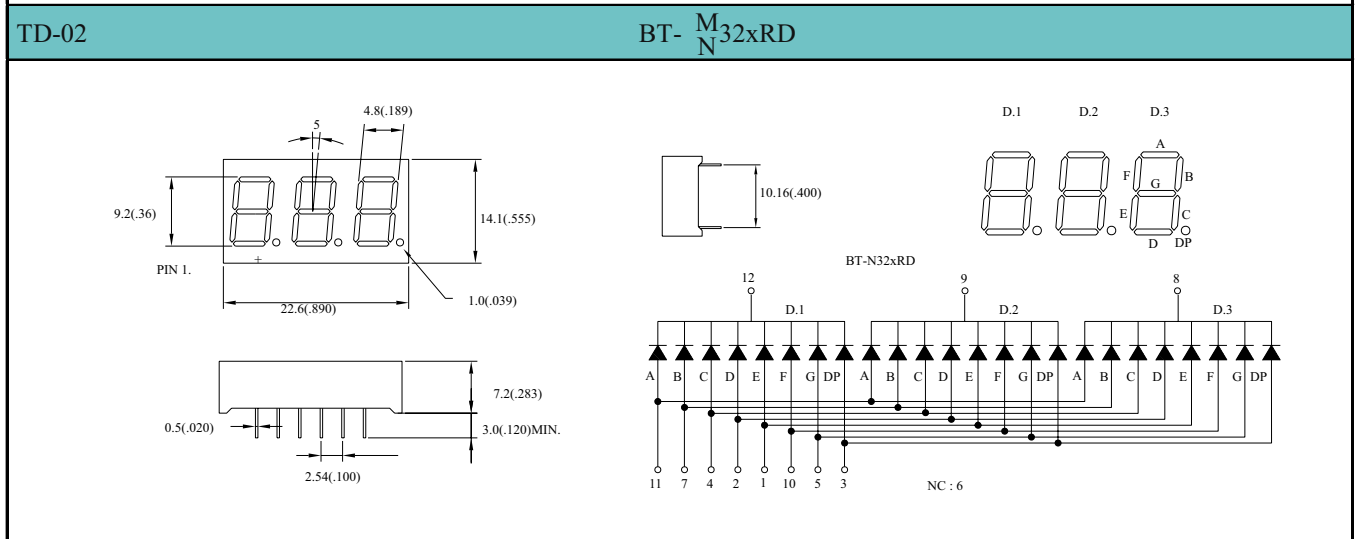
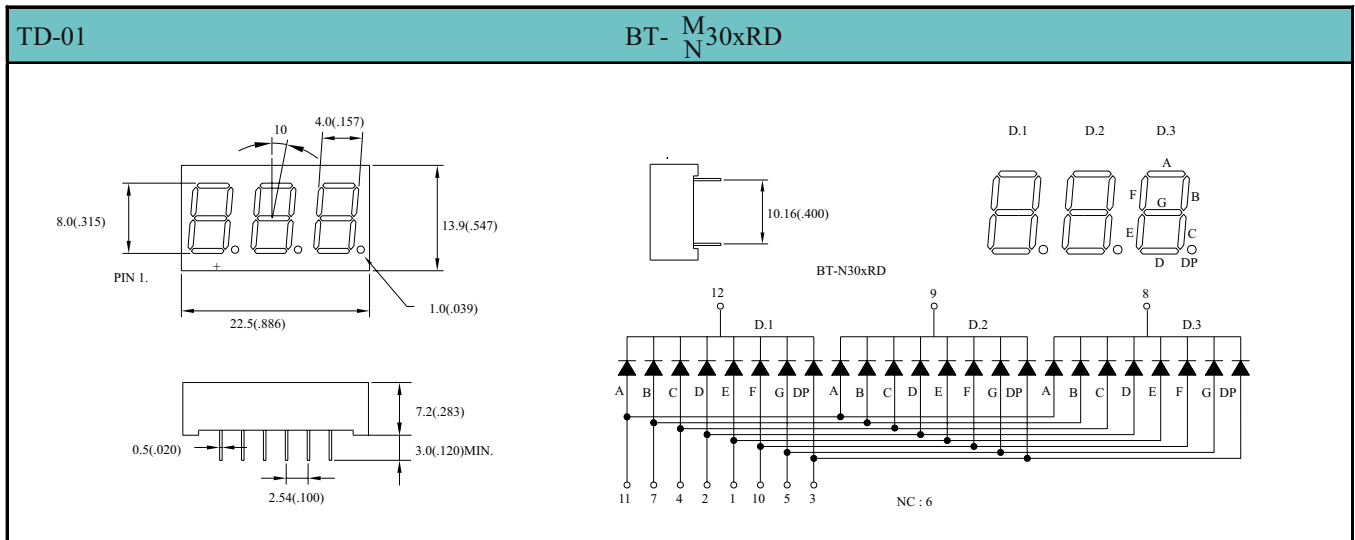


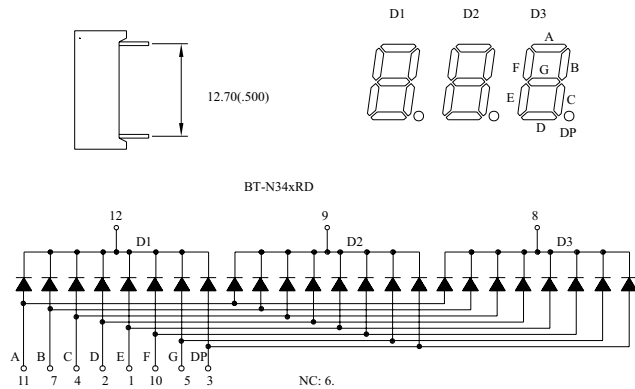
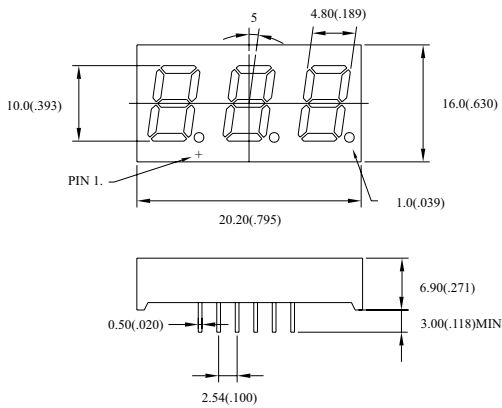
Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length λ_p (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.31" Three-Digit	BT-M301RD	BT-N301RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-01
	BT-M305RD	BT-N305RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-M305RE	BT-N305RE										
	BT-M302RD	BT-N302RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-M303RD	BT-N303RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-M304RD	BT-N304RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-M306RD	BT-N306RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BT-M30DRD	BT-N30DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.36" Three-Digit	BT-M321RD	BT-N321RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-02
	BT-M325RD	BT-N325RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-M325RE	BT-N325RE										
	BT-M322RD	BT-N322RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-M323RD	BT-N323RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-M324RD	BT-N324RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-M326RD	BT-N326RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BT-M32DRD	BT-N32DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



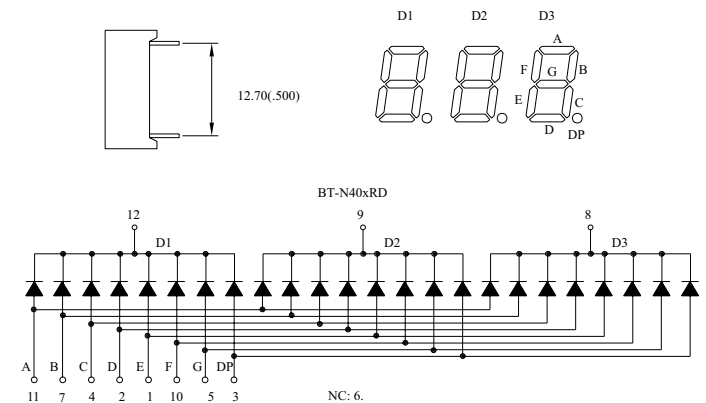
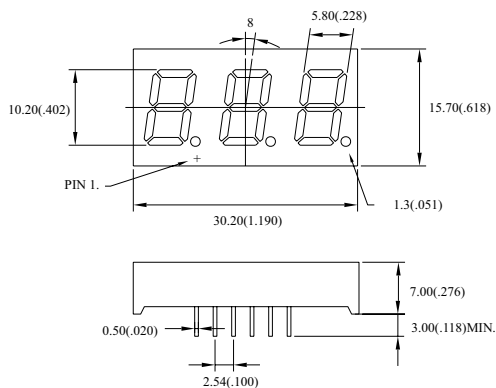
NOTES: 1.All Dimensions are in millimeters(inches).
 2.Tolerance is $\pm 0.25\text{mm}(0.010")$.
 3.Specifications are subject to change without notice.
 4.NP:No Pin. 5.NC:No Connect.

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.		
0.39" Three-Digit	BT-M341RD	BT-N341RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-03
	BT-M345RD	BT-N345RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-M345RE	BT-N345RE										
	BT-M342RD	BT-N342RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-M343RD	BT-N343RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-M344RD	BT-N344RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-M346RD	BT-N346RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BT-M34DRD	BT-N34DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.40" Three-Digit	BT-M401RD	BT-N401RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-04
	BT-M405RD	BT-N405RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-M405RE	BT-N405RE										
	BT-M402RD	BT-N402RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-M403RD	BT-N403RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-M404RD	BT-N404RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-M406RD	BT-N406RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BT-M40DRD	BT-N40DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		

TD-03

 BT- $\frac{M}{N}$ 34xRD


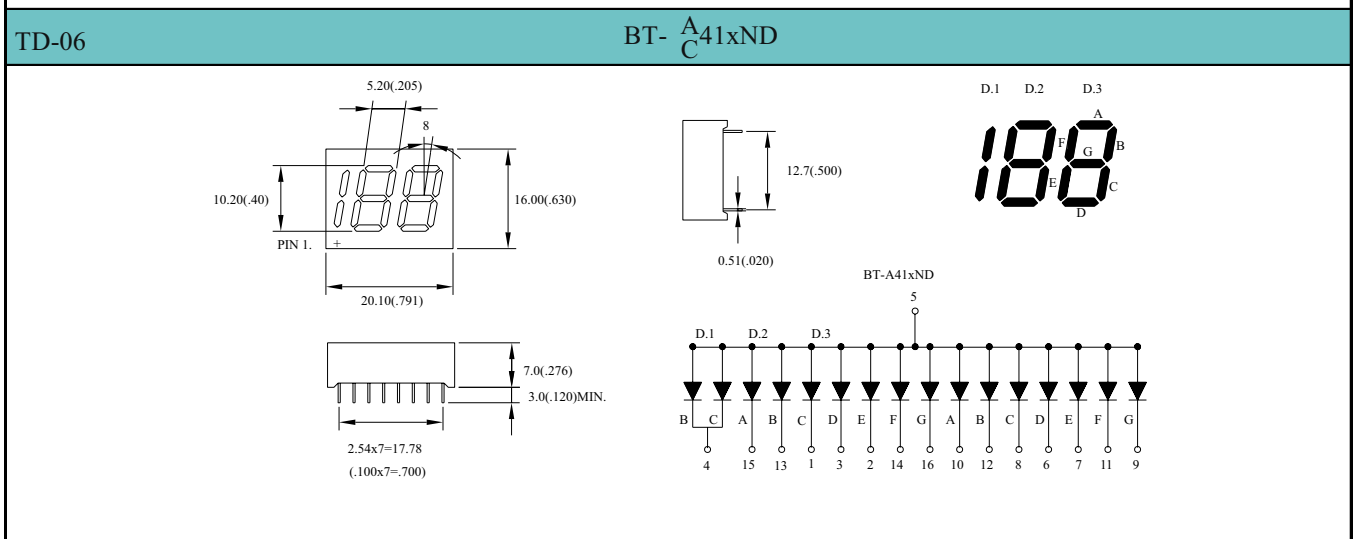
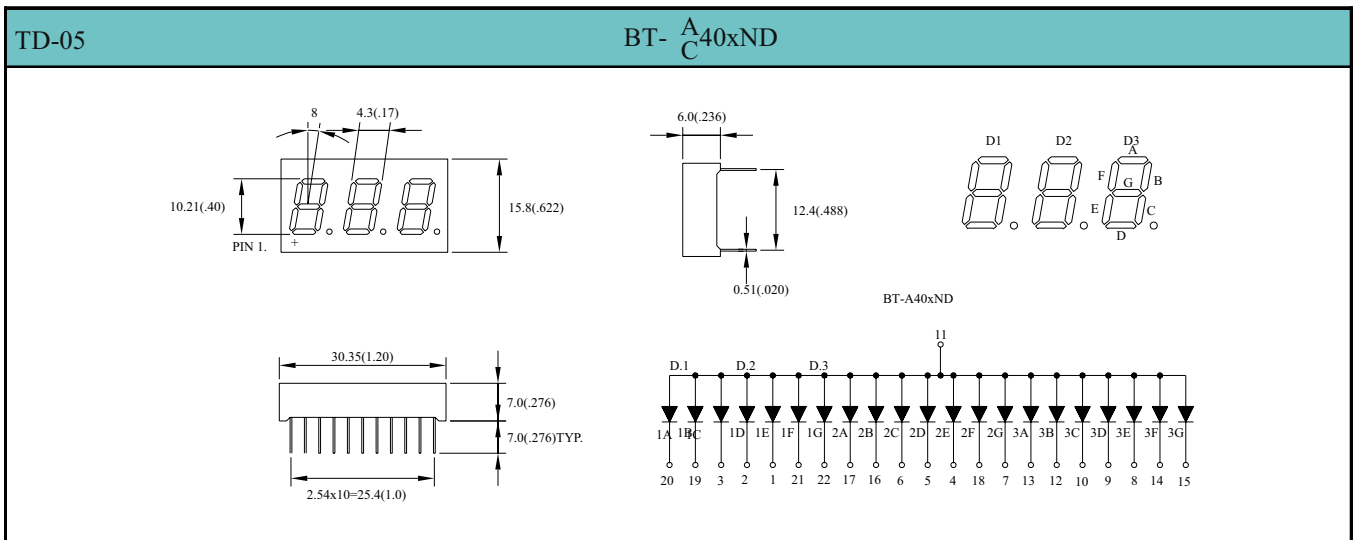
TD-04

 BT- $\frac{M}{N}$ 40xRD


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.

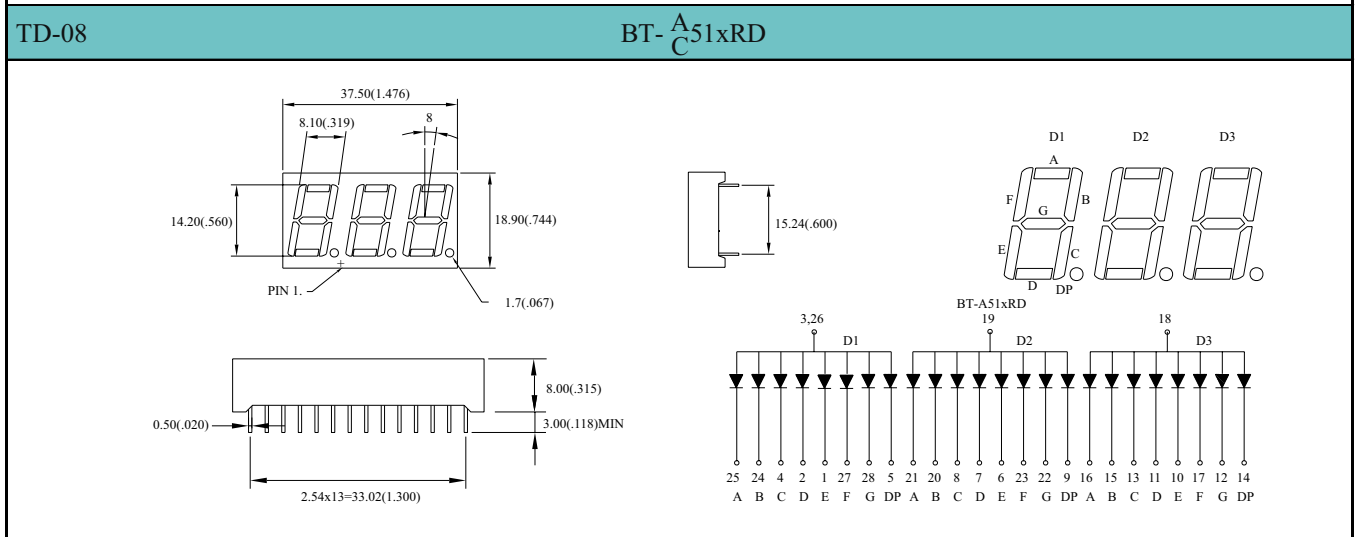
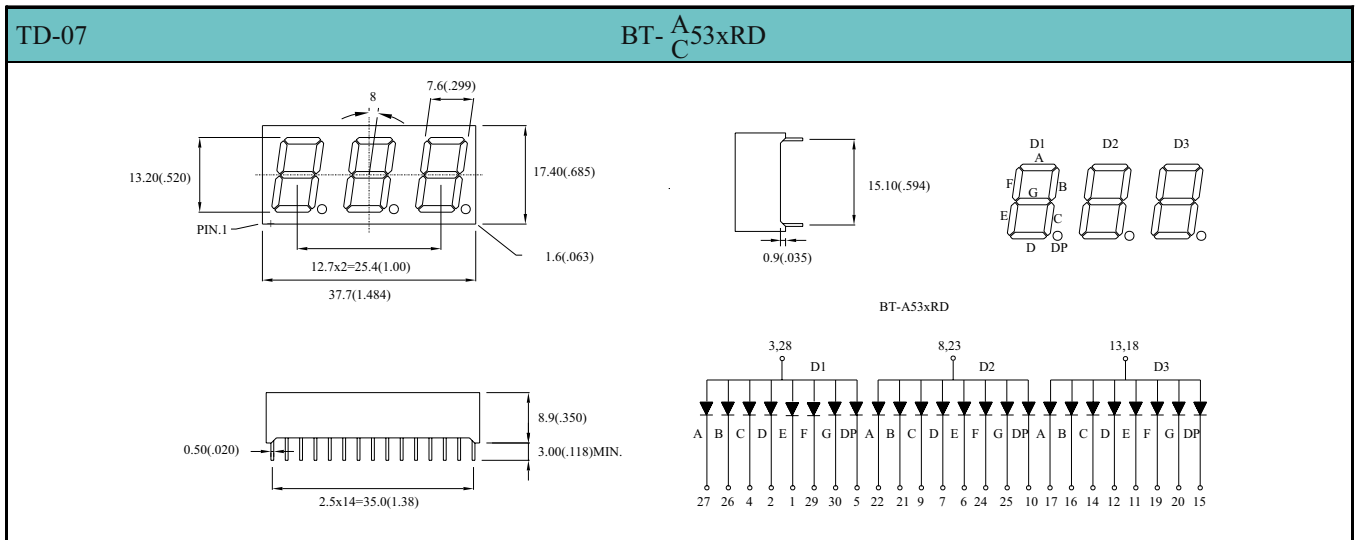
Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length λ_p (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.40" Three-Digit	BT-A401ND	BT-C401ND	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-05
	BT-A405ND	BT-C405ND	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-A405NE	BT-C405NE										
	BT-A402ND	BT-C402ND	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-A403ND	BT-C403ND	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-A404ND	BT-C404ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-A406ND	BT-C406ND	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BT-A40DND	BT-C40DND	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	BT-A411ND	BT-C411ND	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-06
	BT-A415ND	BT-C415ND	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-A415NE	BT-C415NE										
	BT-A412ND	BT-C412ND	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-A413ND	BT-C413ND	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-A414ND	BT-C414ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-A416ND	BT-C416ND	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BT-A41DND	BT-C41DND	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0	



NOTES: 1.All Dimensions are in millimeters(inches).
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2.Tolerance ist 0.25mm(.010").
4.NP:No Pin. 5.NC:No Connect.

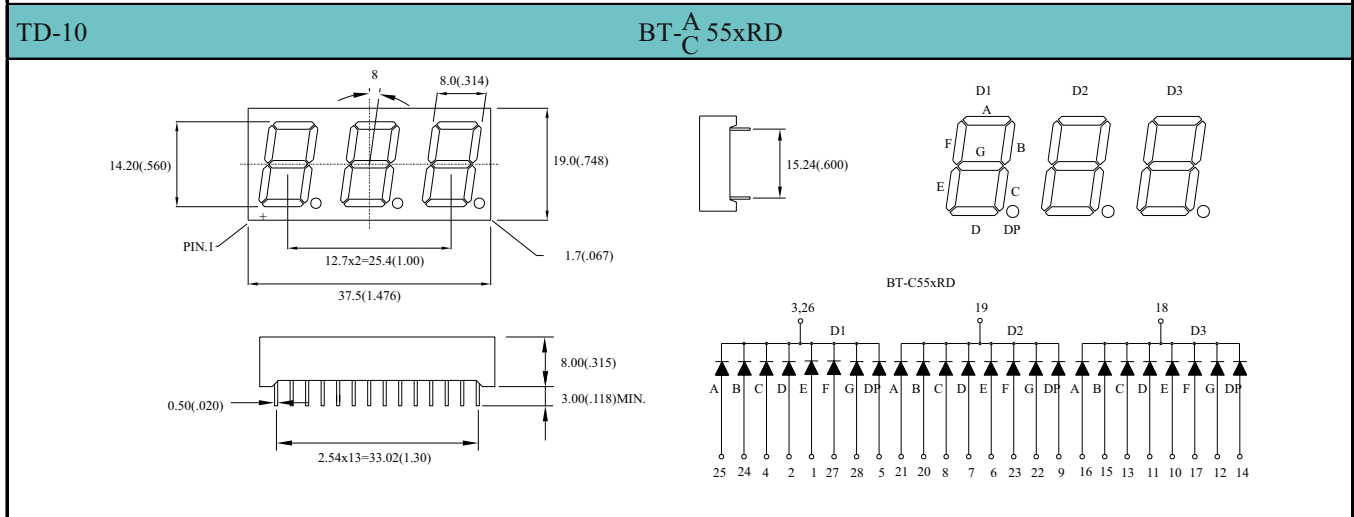
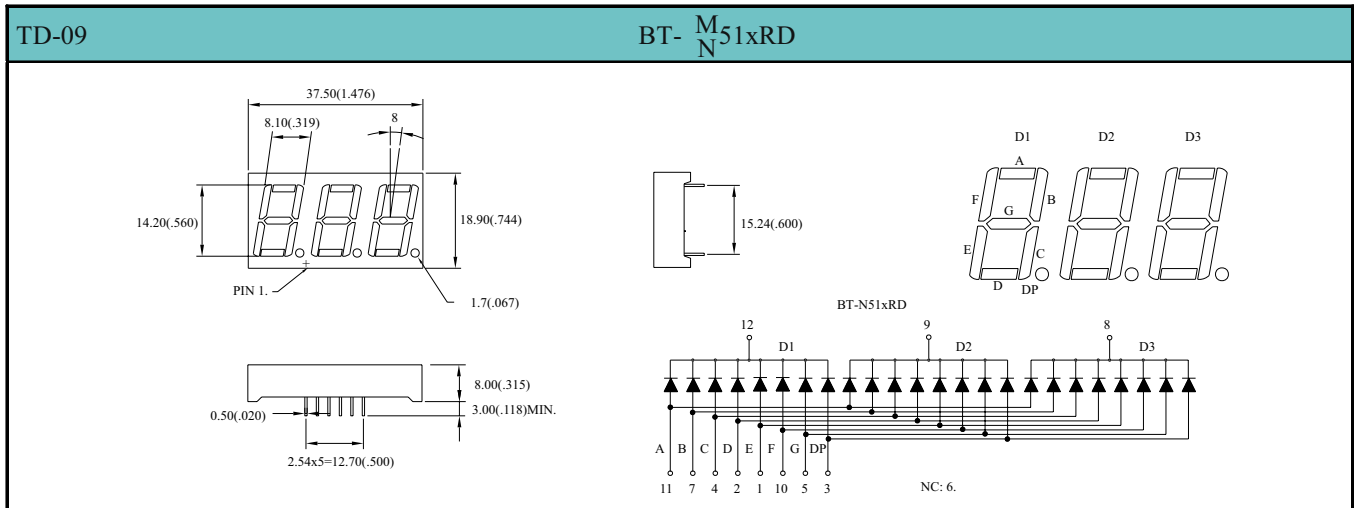
Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length λ_p (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.52" Three-Digit	BT-A531RD	BT-C531RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	TD-07
	BT-A535RD	BT-C535RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BT-A535RE	BT-C535RE										
	BT-A532RD	BT-C532RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-A533RD	BT-C533RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-A534RD	BT-C534RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-A536RD	BT-C536RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
BT-A53DRD	BT-C53DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0		
0.56" Three-Digit	BT-A511RD	BT-C511RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-08
	BT-A515RD	BT-C515RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-A515RE	BT-C515RE										
	BT-A512RD	BT-C512RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-A513RD	BT-C513RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-A514RD	BT-C514RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-A516RD	BT-C516RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BT-A51DRD	BT-C51DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



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

2.Tolerance is 0.25mm(.010").
4.NP:No Pin. 5.NC:No Connect.

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.		
0.56" Three-Digit	BT-M511RD	BT-N511RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-09
	BT-M515RD	BT-N515RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-M515RE	BT-N515RE										
	BT-M512RD	BT-N512RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-M513RD	BT-N513RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-M514RD	BT-N514RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-M516RD	BT-N516RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BT-M51DRD	BT-N51DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	BT-A551RD	BT-C551RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-10
	BT-A555RD	BT-C555RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-A552RD	BT-C552RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-A553RD	BT-C553RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-A554RD	BT-C554RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-A556RD	BT-C556RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BT-A55DRD	BT-C55DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0	



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.

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.		
0.56" Three-Digit	BT-M551RD	BT-N551RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	TD-11
	BT-M555RD	BT-N555RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BT-M555RE	BT-N555RE										
	BT-M552RD	BT-N552RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BT-M553RD	BT-N553RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BT-M554RD	BT-N554RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BT-M556RD	BT-N556RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BT-M55DRD	BT-N55DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.80" Three-Digit	BT-M811RD	BT-N811RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	1.3	TD-12
	BT-M815RD	BT-N815RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	
	BT-M815RE	BT-N815RE										
	BT-M812RD	BT-N812RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	BT-M813RD	BT-N813RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
			GaAsP/GaP/ Hi-Eff.Red									
	BT-M814RD	BT-N814RD	GaAsP/GaP/ Orange	635	45	80	30	150	2.0	2.5	3.2	
	BT-M816RD	BT-N816RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
BT-M81DRD	BT-N81DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	12.5		

TD-11
BT- $\frac{M}{N}$ 55xRD

TD-12
BT- $\frac{M}{N}$ 81xRD

NOTES: 1.All Dimensions are in millimeters(inches)
 2.Tolerance is $\pm 0.25\text{mm}(\pm 0.010")$.
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 4.NP:No Pin. 5.NC:No Connect.