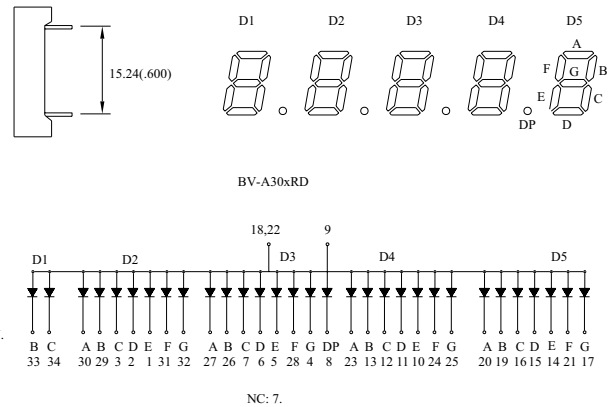
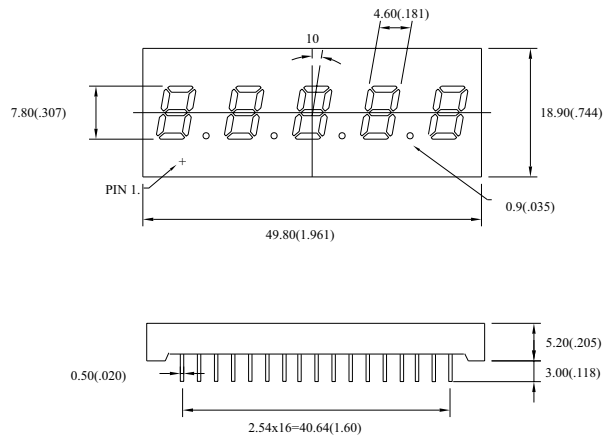
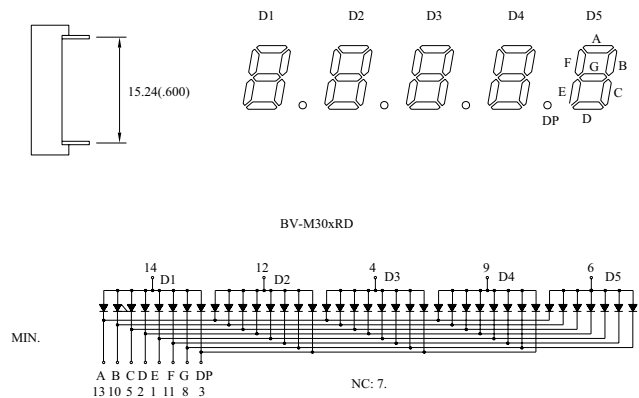
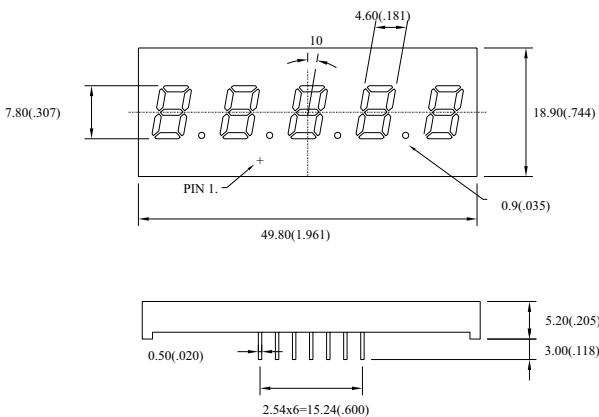


Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)		Drawing No.	
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length λ_p (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)			Iv. Typ. Per.Seg. (mcd)
									Typ.	Max.		
0.30" Five-Digit	BV-A301RD	BV-C301RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	VD-01
	BV-A305RD	BV-C305RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BV-A305RE	BV-C305RE										
	BV-A302RD	BV-C302RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BV-A303RD	BV-C303RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BV-A304RD	BV-C304RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BV-A306RD	BV-C306RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BV-A30DRD	BV-C30DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	BV-M301RD	BV-N301RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	VD-02
	BV-M305RD	BV-N305RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BV-M305RE	BV-N305RE										
	BV-M302RD	BV-N302RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BV-M303RD	BV-N303RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BV-M304RD	BV-N304RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BV-M306RD	BV-N306RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
	BV-M30DRD	BV-N30DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0	

VD-01

 BV- A₃₀xRD


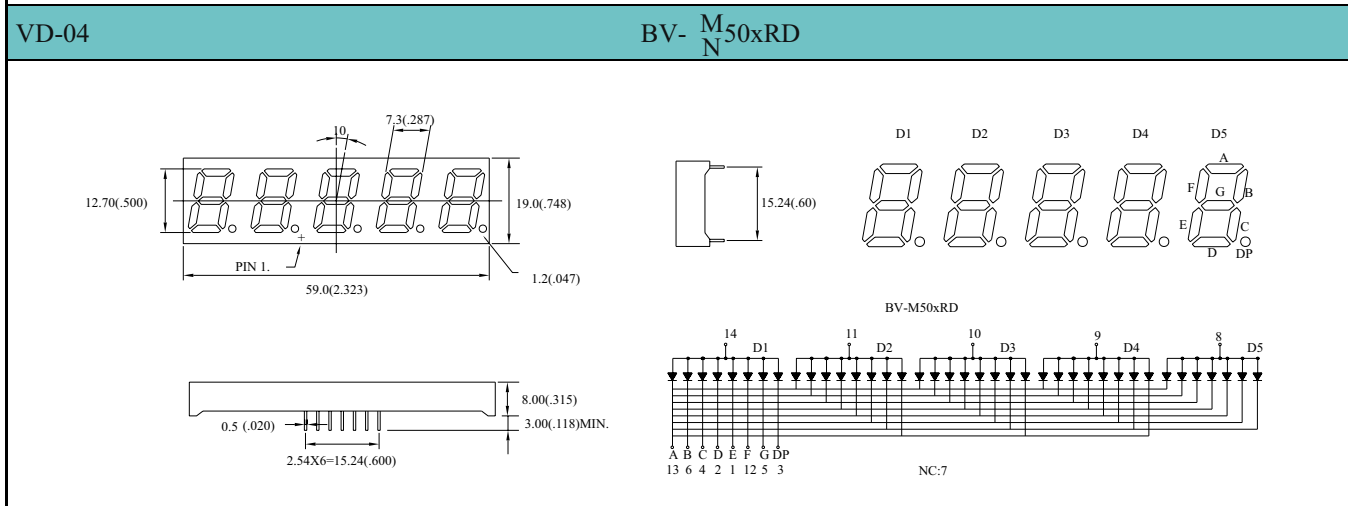
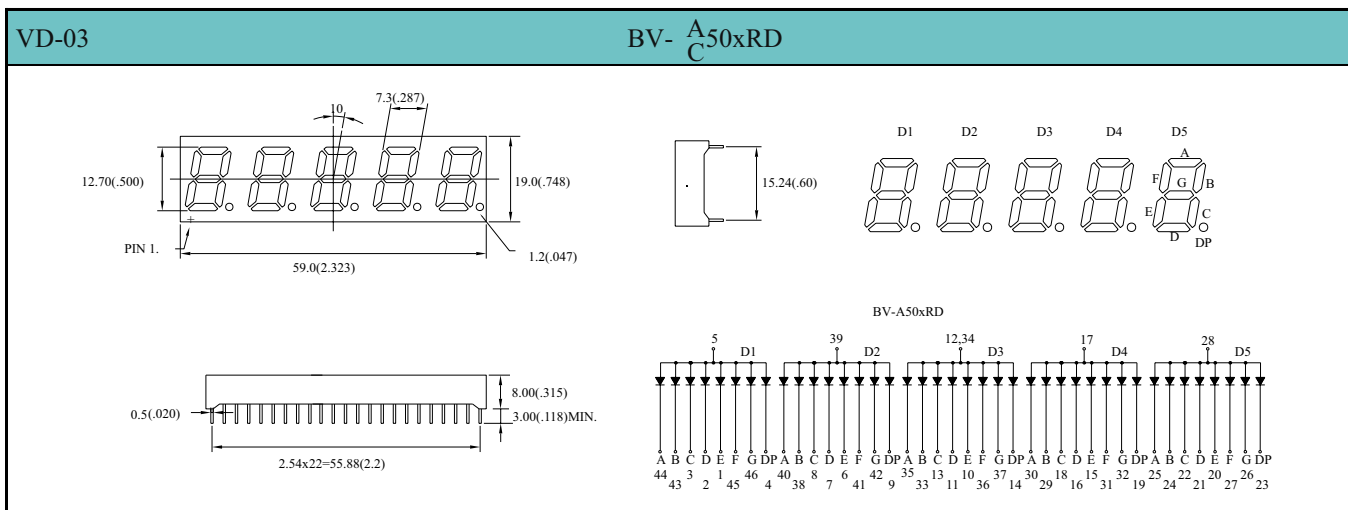
VD-02

 BV- M_N30xRD


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

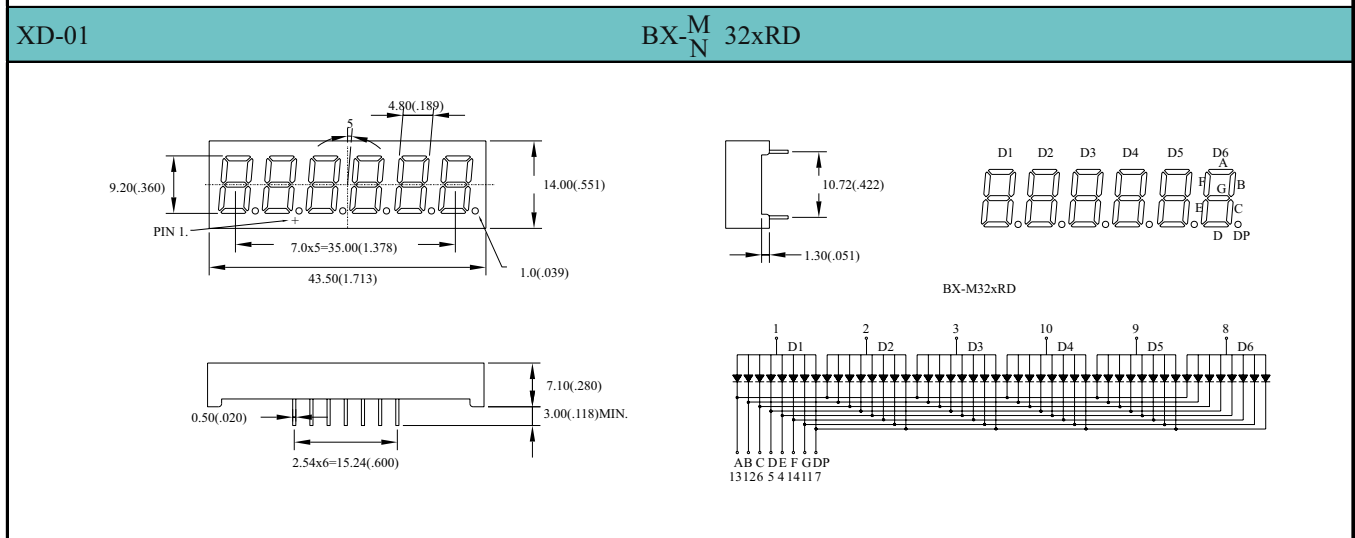
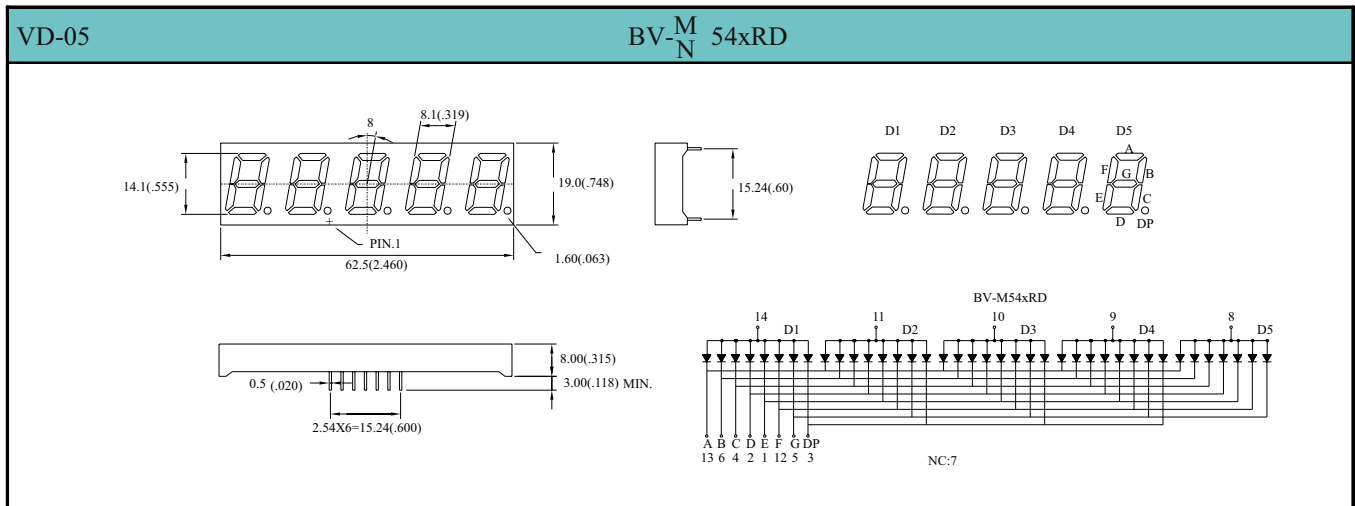
2.Tolerance is ± 0.25mm(.010").
4.NP:No Pin. 5.NC:No Connect.

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.		
0.50" Five-Digit	BV-A501RD	BV-C501RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	VD-03
	BV-A505RD	BV-C505RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BV-A505RE	BV-C505RE										
	BV-A502RD	BV-C502RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BV-A503RD	BV-C503RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BV-A504RD	BV-C504RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BV-A506RD	BV-C506RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	BV-A50DRD	BV-C50DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	
	BV-M501RD	BV-N501RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	VD-04
	BV-M505RD	BV-N505RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BV-M505RE	BV-N505RE										
	BV-M502RD	BV-N502RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BV-M503RD	BV-N503RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BV-M504RD	BV-N504RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BV-M506RD	BV-N506RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	BV-M50DRD	BV-N50DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	



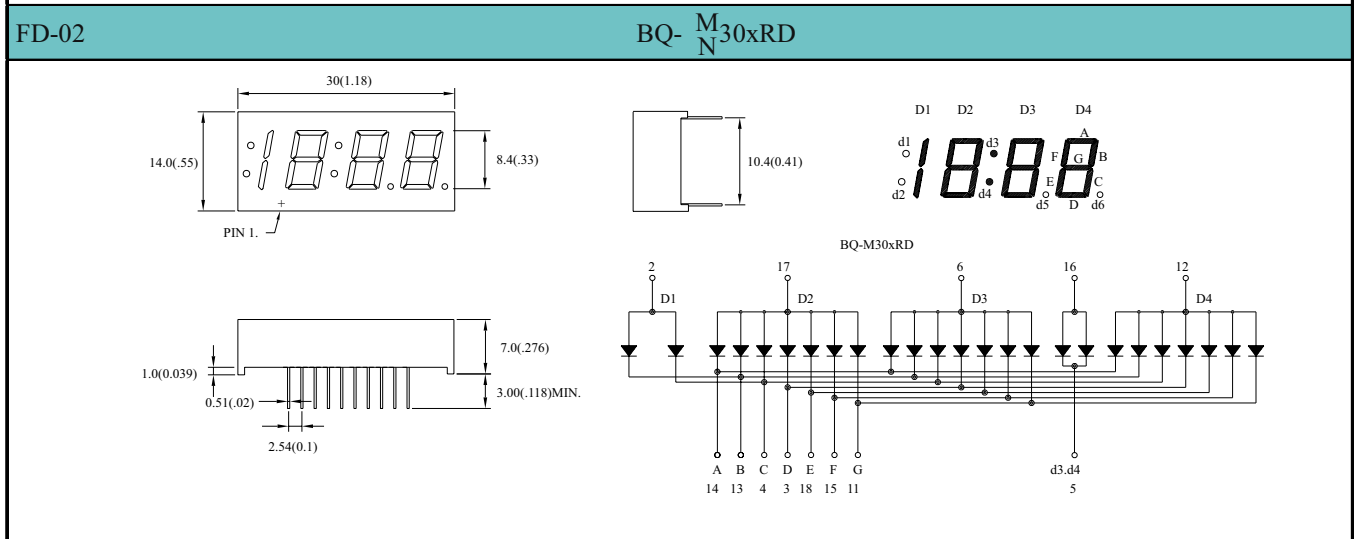
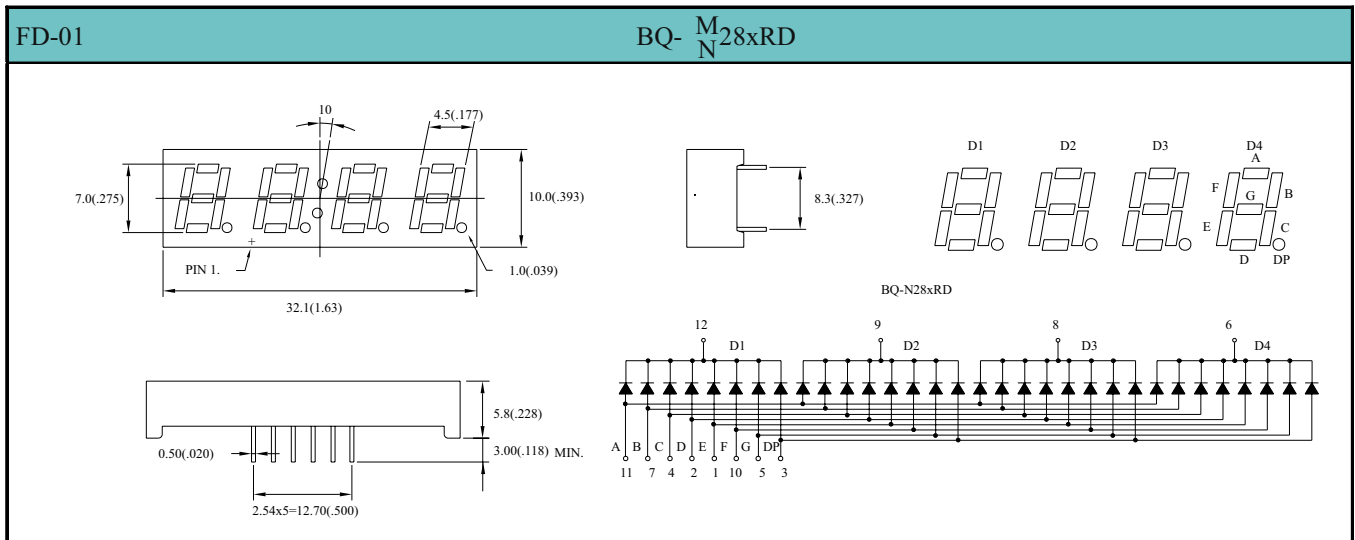
NOTES: 1.All Dimensions are in millimeters(inches).
 2.Tolerance ist 0.25mm(.010").
 3.Specifications are subject to change without notice.
 4.NP:No Pin. 5.NC:No Connect.

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.		
0.56" Five-Digit	BV-M541RD	BV-N541RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	VD-05
	BV-M545RD	BV-N545RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BV-M545RE	BV-N545RE										
	BV-M542RD	BV-N542RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BV-M543RD	BV-N543RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BV-M544RD	BV-N544RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
BV-M546RD	BV-N546RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0		
BV-M54DRD	BV-N54DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0		
0.36" Six-Digit	BV-M321RD	BV-N321RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	XD-01
	BV-M325RD	BV-N325RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BV-M325RE	BV-N325RE										
	BV-M322RD	BV-N322RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BV-M323RD	BV-N323RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BV-M324RD	BV-N324RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
BV-M326RD	BV-N326RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
BV-M32DRD	BV-N32DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



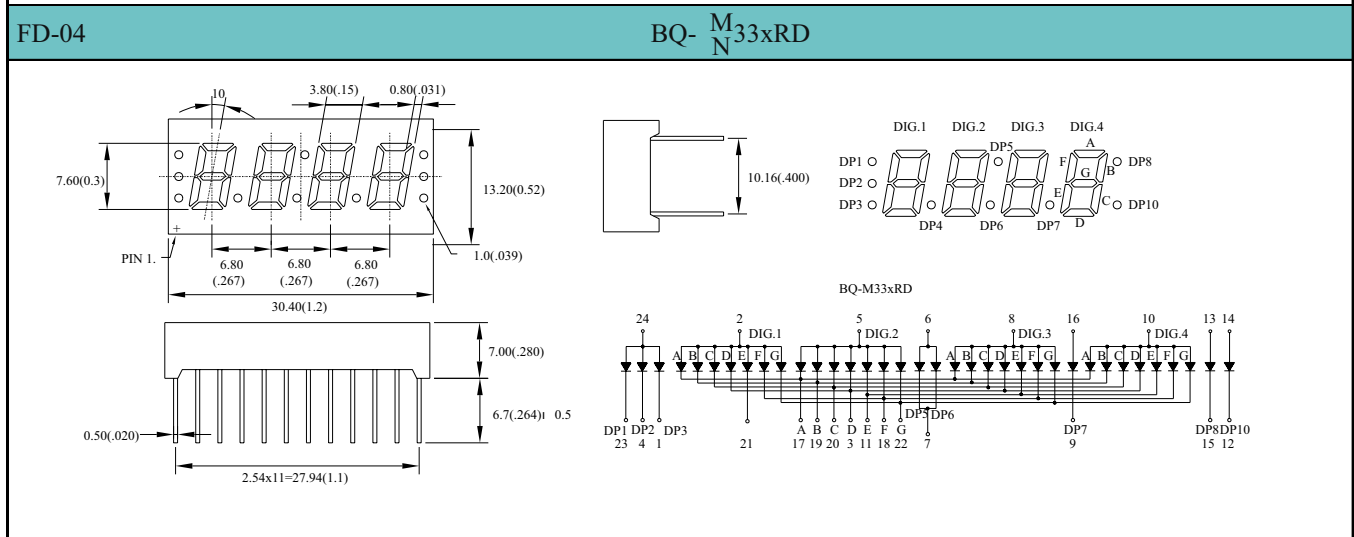
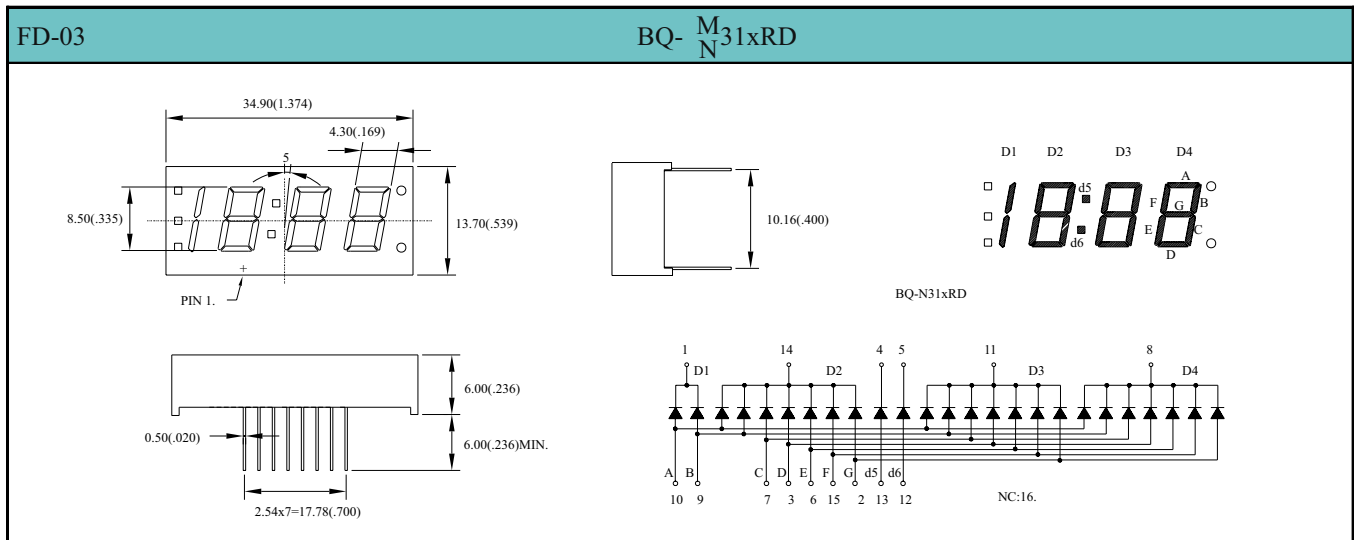
NOTES: 1.All Dimensions are in millimeters(inches).
 2.Tolerance is $\pm 0.25\text{mm}(.010")$.
 3.Specifications are subject to change without notice.
 4.NP:No Pin. 5.NC:No Connect.

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.		
0.28" Four-Digit	BQ-M281RD	BQ-N281RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.5	FD-01
	BQ-M285RD	BQ-N285RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.0	
	BQ-M285RE	BQ-N285RE										
	BQ-M282RD	BQ-N282RD	GaP/ Green	568	30	80	30	150	2.2	2.5	2.5	
	BQ-M283RD	BQ-N283RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BQ-M284RD	BQ-N284RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.5	
			GaAsP/GaP/ Orange									
	BQ-M286RD	BQ-N286RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	4.5	
BQ-M28DRD	BQ-N28DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	5.5		
0.30" Four-Digit	BQ-M301RD	BQ-N301RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	FD-02
	BQ-M305RD	BQ-N305RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BQ-M305RE	BQ-N305RE										
	BQ-M302RD	BQ-N302RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BQ-M303RD	BQ-N303RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BQ-M304RD	BQ-N304RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BQ-M306RD	BQ-N306RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BQ-M30DRD	BQ-N30DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



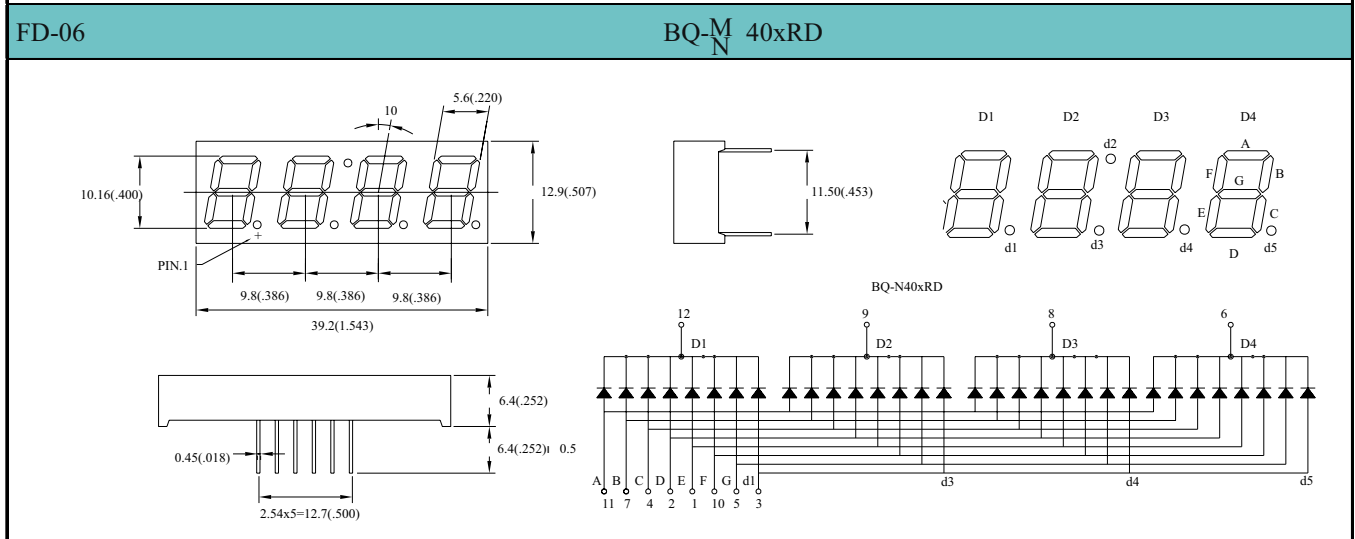
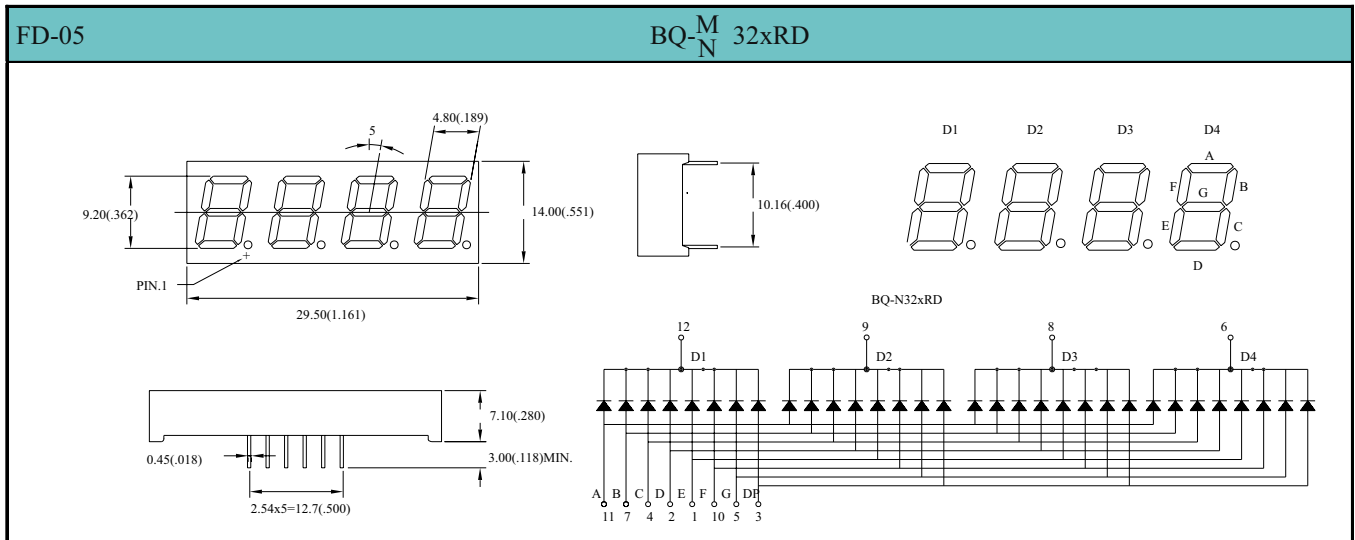
NOTES: 1.All Dimensions are in millimeters(inches).
 2.Tolerance is $\pm 0.25\text{mm}(0.010")$.
 3.Specifications are subject to change without notice.
 4.NP:No Pin. 5.NC:No Connect.

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.		
0.31" Four-Digit	BQ-M311RD	BQ-N311RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	FD-03
	BQ-M315RD	BQ-N315RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BQ-M315RE	BQ-N315RE										
	BQ-M312RD	BQ-N312RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BQ-M313RD	BQ-N313RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BQ-M314RD	BQ-N314RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BQ-M316RD	BQ-N316RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BQ-M31DRD	BQ-N31DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.33" Four-Digit	BQ-M331RD	BQ-N331RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	FD-04
	BQ-M335RD	BQ-N335RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BQ-M335RE	BQ-N335RE										
	BQ-M332RD	BQ-N332RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BQ-M333RD	BQ-N333RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BQ-M334RD	BQ-N334RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
	BQ-M336RD	BQ-N336RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
BQ-M33DRD	BQ-N33DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



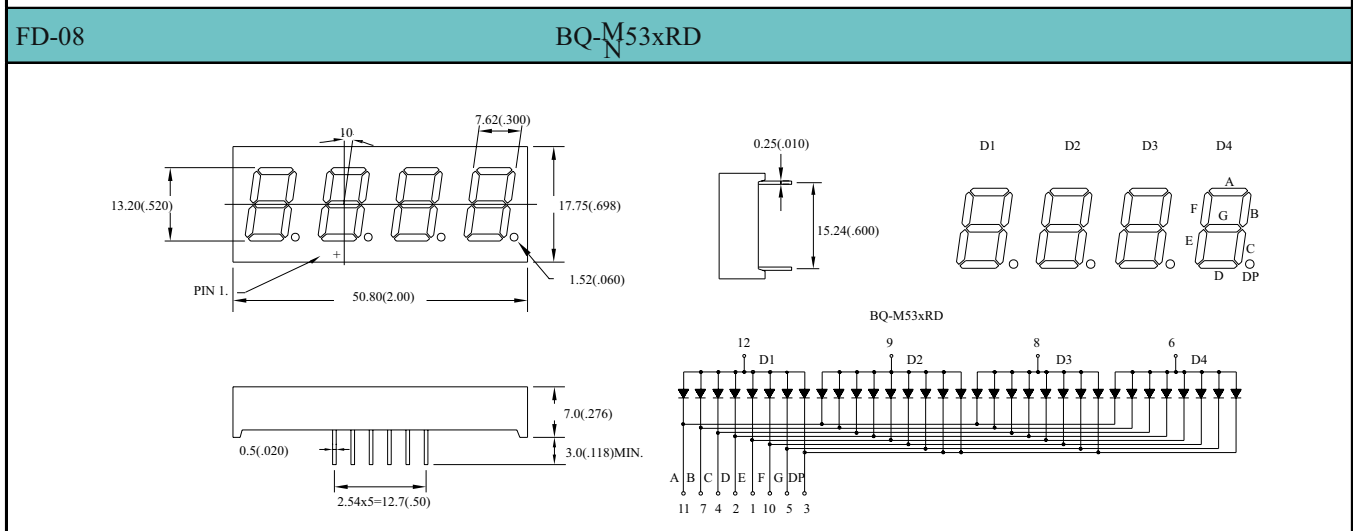
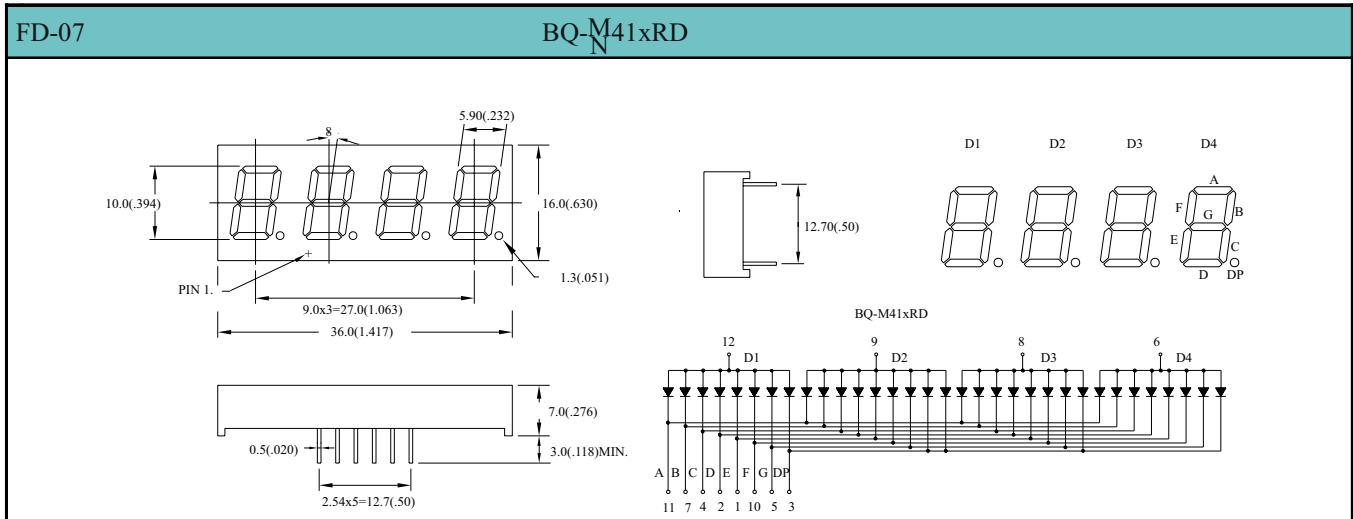
NOTES: 1. All Dimensions are in millimeters(inches).
 2. Tolerance is 0.25mm(.010").
 3. Specifications are subject to change without notice.
 4. NP:No Pin. 5. NC:No Connect.

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.		
0.36" Four-Digit	BQ-M321RD	BQ-N321RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	FD-05
	BQ-M325RD	BQ-N325RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BQ-M325RE	BQ-N325RE										
	BQ-M322RD	BQ-N322RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BQ-M323RD	BQ-N323RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BQ-M324RD	BQ-N324RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
BQ-M326RD	BQ-N326RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
BQ-M32DRD	BQ-N32DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.40" Four-Digit	BQ-M401RD	BQ-N401RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	FD-06
	BQ-M405RD	BQ-N405RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BQ-M405RE	BQ-N405RE										
	BQ-M402RD	BQ-N402RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BQ-M403RD	BQ-N403RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BQ-M404RD	BQ-N404RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
BQ-M406RD	BQ-N406RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
BQ-M40DRD	BQ-N40DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



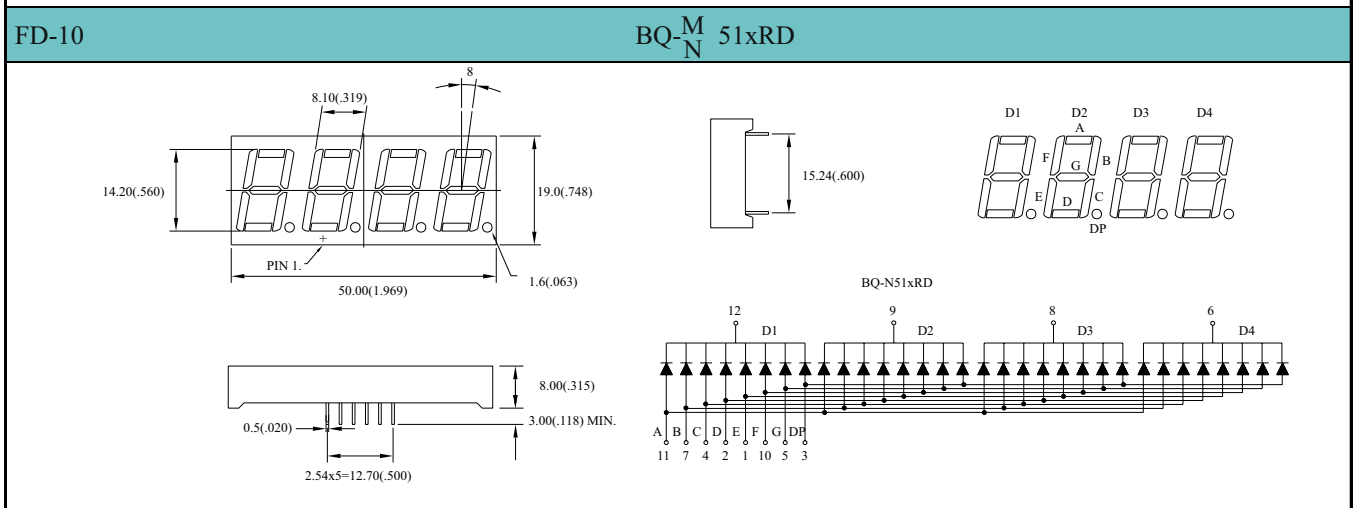
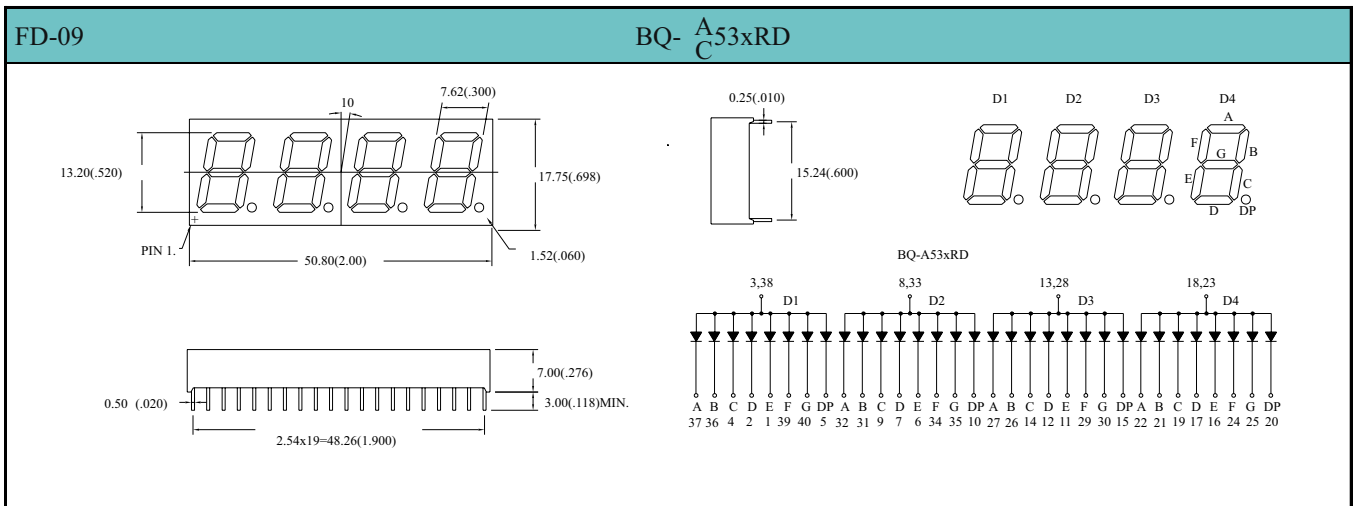
NOTES: 1.All Dimensions are in millimeters(inches).
 2.Tolerance is $\pm 0.25\text{mm}(0.010")$.
 3.Specifications are subject to change without notice.
 4.NP:No Pin. 5.NC:No Connect.

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.		
0.40" Four-Digit	BQ-M411RD	BQ-N411RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	FD-07
	BQ-M415RD	BQ-N415RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	BQ-M415RE	BQ-N415RE										
	BQ-M412RD	BQ-N412RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	BQ-M413RD	BQ-N413RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	BQ-M414RD	BQ-N414RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
			GaAsP/GaP/ Orange									
BQ-M416RD	BQ-N416RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
BQ-M41DRD	BQ-N41DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.52" Four-Digit	BQ-M531RD	BQ-N531RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	D-08
	BQ-M535RD	BQ-N535RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BQ-M535RE	BQ-N535RE										
	BQ-M532RD	BQ-N532RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BQ-M533RD	BQ-N533RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BQ-M534RD	BQ-N534RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
BQ-M536RD	BQ-N536RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5		
BQ-M53DRD	BQ-N53DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		



NOTES: 1.All Dimensions are in millimeters(inches).
 2.Tolerance is $\pm 0.25\text{mm}(.010^\circ)$.
 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.		
0.52" Four-Digit	BQ-A531RD	BQ-C531RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	FD-09
	BQ-A535RD	BQ-C535RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BQ-A535RE	BQ-C535RE										
	BQ-A532RD	BQ-C532RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BQ-A533RD	BQ-C533RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BQ-A534RD	BQ-C534RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BQ-A536RD	BQ-C536RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
BQ-A53DRD	BQ-C53DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.56" Four-Digit	BQ-M511RD	BQ-N511RD	GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	FD-10
	BQ-M515RD	BQ-N515RD	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	BQ-M515RE	BQ-N515RE										
	BQ-M512RD	BQ-N512RD	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	BQ-M513RD	BQ-N513RD	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	BQ-M514RD	BQ-N514RD	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
			GaAsP/GaP/ Orange									
	BQ-M516RD	BQ-N516RD	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
BQ-M51DRD	BQ-N51DRD	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		



NOTES: 1.All Dimensions are in millimeters(inches).
 2.Tolerance is ± 0.25mm(.010").
 3.Specifications are subject to change without notice.
 4.NP:No Pin. 5.NC:No Connect.