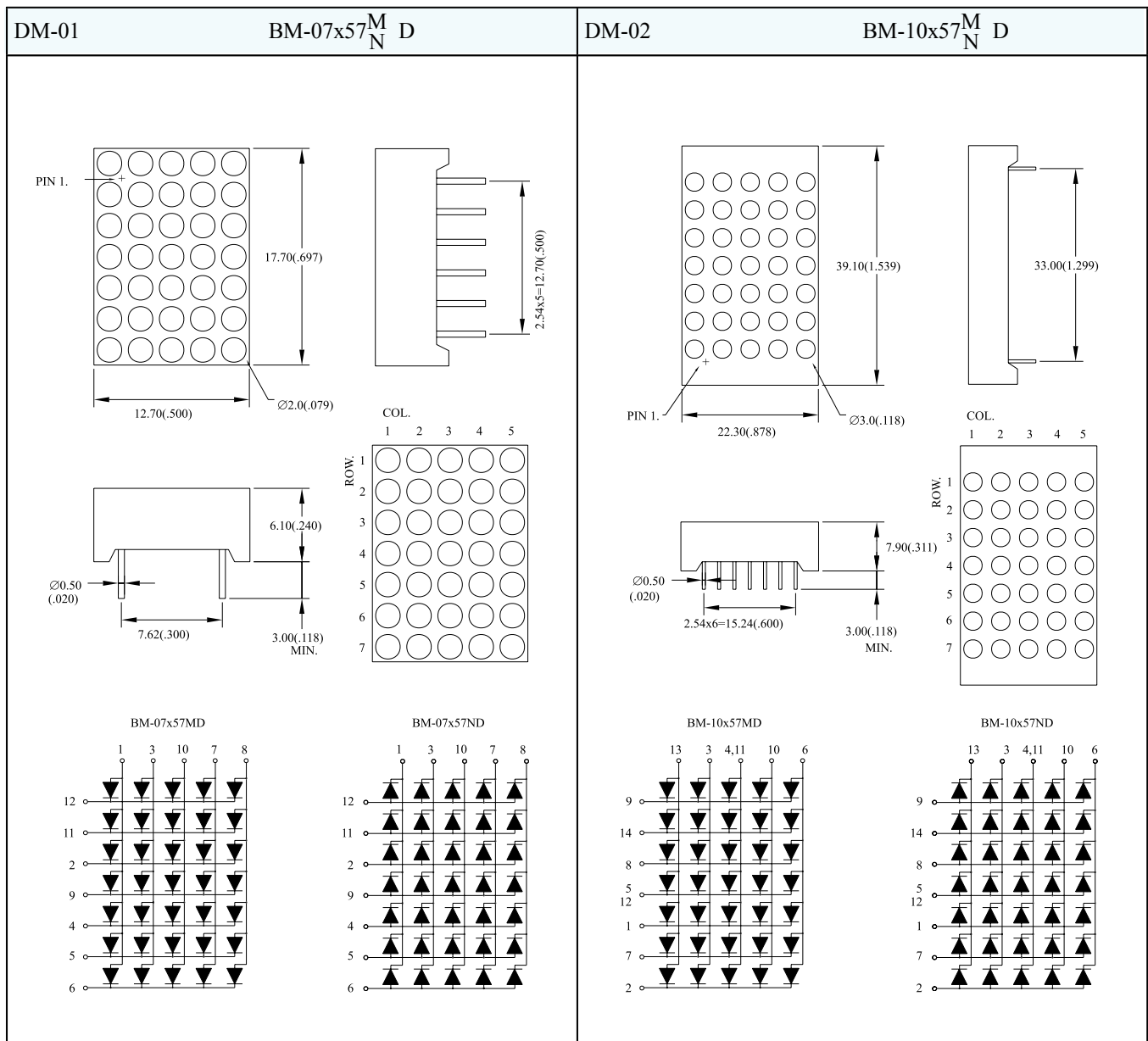




LED Dot Matrix Display 5 x 7 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
0.70" High Ø2.0	BM-07257MD	BM-07257ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	DM-01
	BM-07457MD	BM-07457ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	BM-07657MD	BM-07657ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	12.0	
	BM-07J57MD	BM-07J57ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	28.0	
	BM-07K57MD	BM-07K57ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	30.0	
1.20" High Ø3.0	BM-10257MD	BM-10257ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	DM-02
	BM-10457MD	BM-10457ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	BM-10657MD	BM-10657ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	12.0	
	BM-10J57MD	BM-10J57ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	28.0	
	BM-10K57MD	BM-10K57ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	30.0	



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

3.Specifications are subject to change without notice.

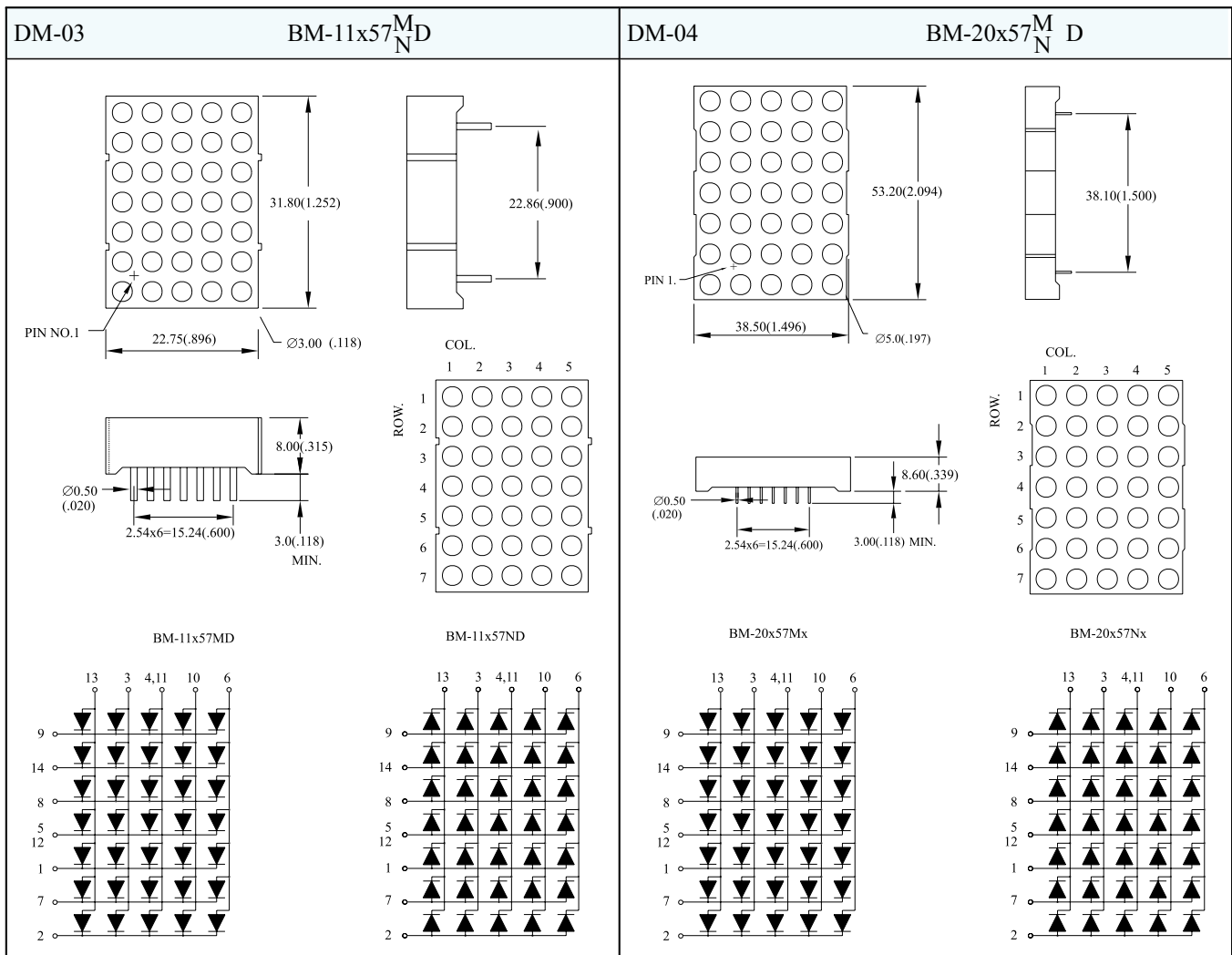
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 5 x 7 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
1.40" High $\varnothing 3.0$	BM-11257MD	BM-11257ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	DM-03
	BM-11457MD	BM-11457ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	BM-11457MA	BM-11457NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	16.0	
	BM-11657MD	BM-11657ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	14.0	
	BM-11657MA	BM-11657NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	18.0	
	BM-11F57MD	BM-11F57ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	20.0	
	BM-11J57MD	BM-11J57ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	28.0	
	BM-11K57MD	BM-11K57ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	30.0	
2.00" High $\varnothing 5.0$	BM-20257MD	BM-20257ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DM-04
	BM-20457MD	BM-20457ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	BM-20457MA	BM-20457NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	20.0	
	BM-20657MD	BM-20657ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	16.0	
	BM-20657MA	BM-20657NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	24.0	
	BM-20F57MD	BM-20F57ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	22.0	
	BM-20J57MD	BM-20J57ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	30.0	
	BM-20K57MD	BM-20K57ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	32.0	



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

3.Specifications are subject to change without notice.

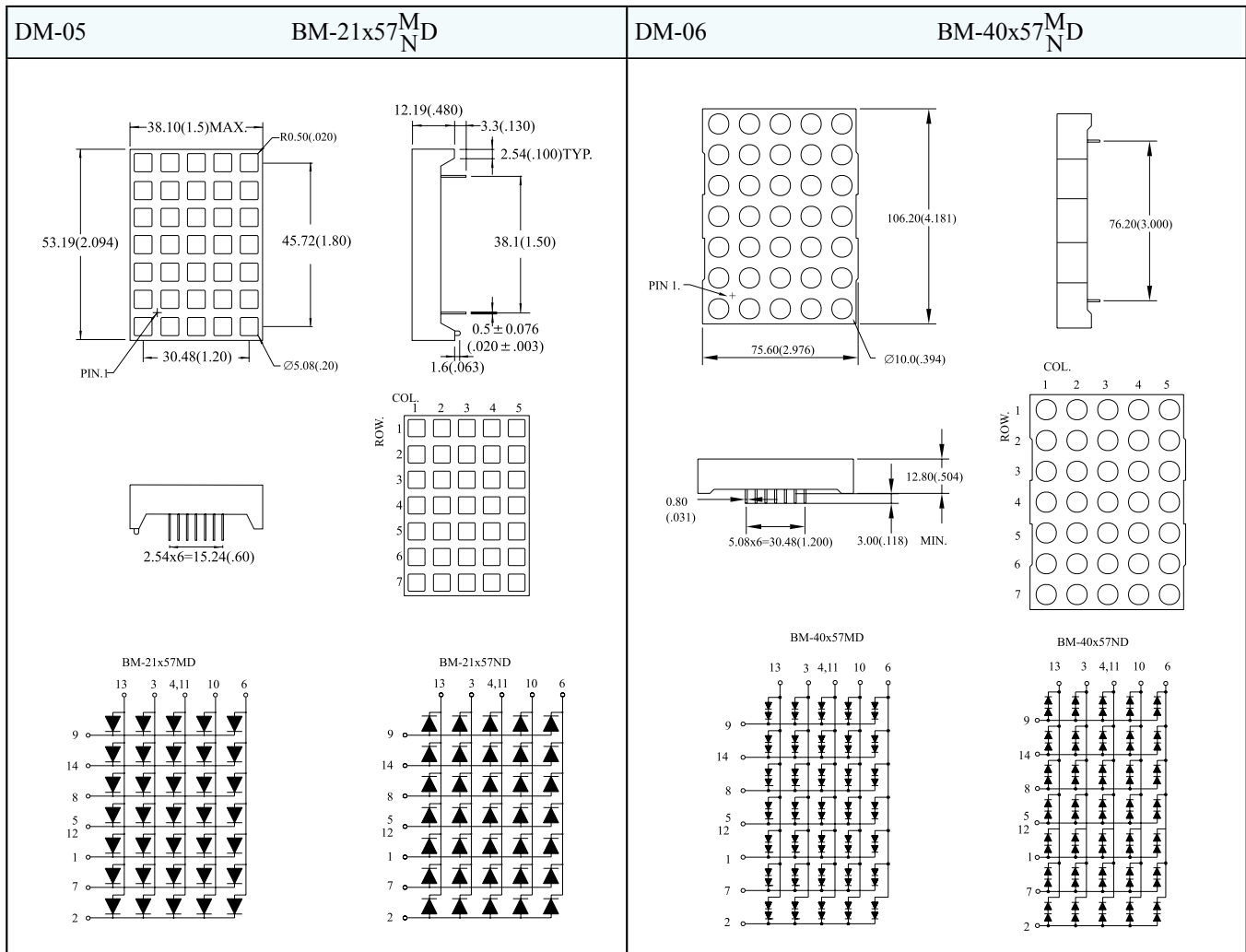
2.Tolerance is ± 0.25 mm(.010")

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



LED Dot Matrix Display 5 x 7 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
2.00" High Ø5.0	BM-21257MD	BM-21257ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DM-05
	BM-21457MD	BM-21457ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	BM-21457MA	BM-21457NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	20.0	
	BM-21657MD	BM-21657ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	16.0	
	BM-21657MA	BM-21657NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	24.0	
	BM-21F57MD	BM-21F57ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	22.0	
	BM-21J57MD	BM-21J57ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	30.0	
4.00" High Ø10.0	BM-21K57MD	BM-21K57ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	32.0	DM-06
	BM-40257MD	BM-40257ND	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	15.0	
	BM-40457MD	BM-40457ND	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	15.0	
	BM-40457MA	BM-40457NA	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	23.0	
	BM-40657MD	BM-40657ND	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	20.0	
	BM-40657MA	BM-40657NA	GaAlAs/ SH/ Super Red	660	20	160	30 <td 150	3.4	5.0	25.0		
	BM-40F57MD	BM-40F57ND	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	20.0	
BM-40J57MD	BM-40J57ND	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	32.0		
BM-40K57MD	BM-40K57ND	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	35.0		



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

3.Specifications are subject to change without notice.

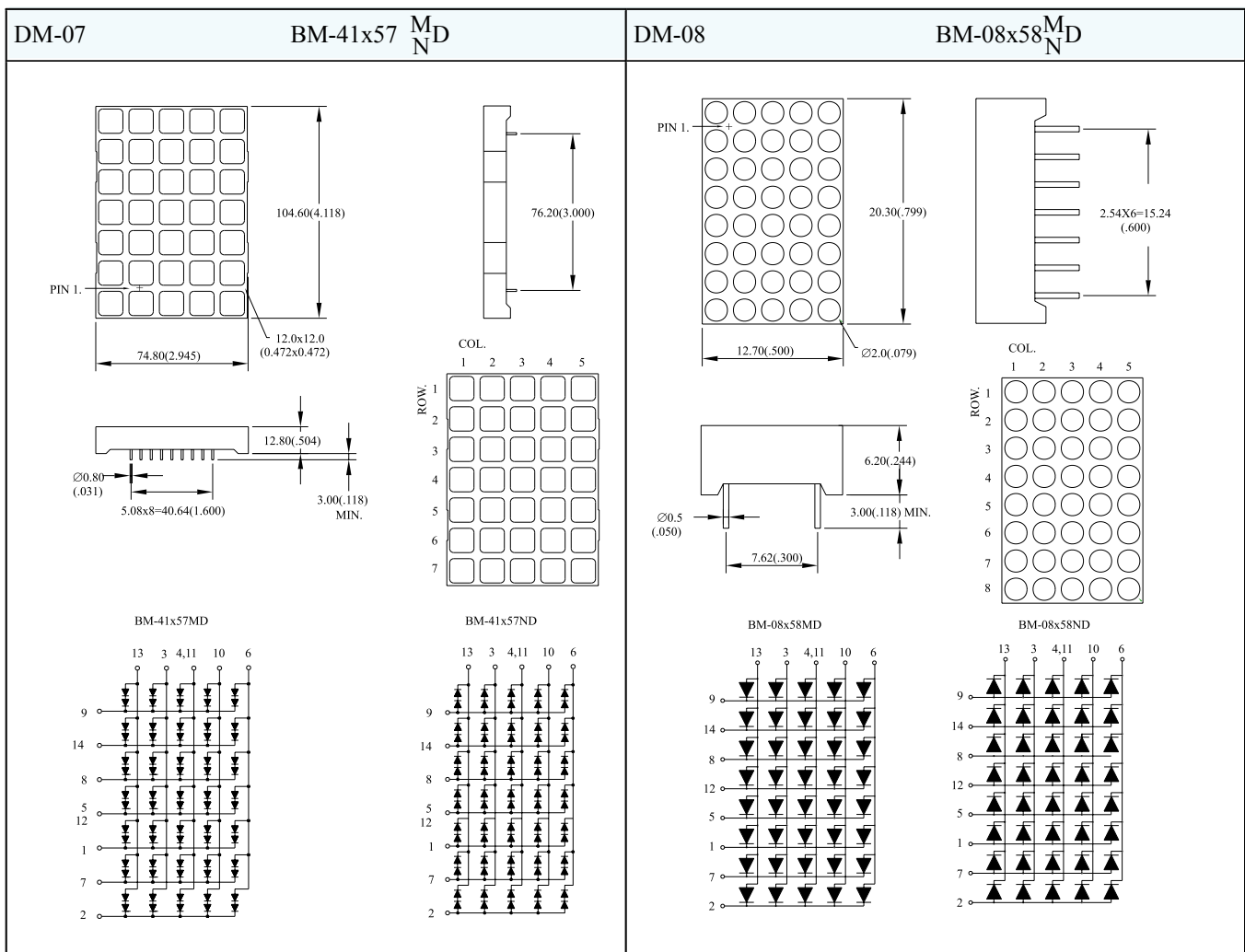
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 5 x 7, 5 x 8 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
4.00" High 12.0*12.0 mm	BM-41257MD	BM-41257ND	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	15.0	DM-07
	BM-41457MD	BM-41457ND	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	15.0	
	BM-41457MA	BM-41457NA	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	23.0	
	BM-41657MD	BM-41657ND	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	20.0	
	BM-41657MA	BM-41657NA	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	25.0	
	BM-41F57MD	BM-41F57ND	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	20.0	
	BM-41J57MD	BM-41J57ND	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	32.0	
	BM-41K57MD	BM-41K57ND	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	35.0	
0.80" High Ø2.0	BM-08258MD	BM-08258ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	DM-08
	BM-08458MD	BM-08458ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	BM-08458MA	BM-08458NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	BM-08658MD	BM-08658ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	12.0	
	BM-08658MA	BM-08658NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	16.0	
	BM-08F58MD	BM-08F58ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	18.0	
	BM-08J58MD	BM-08J58ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	20.0	
	BM-08K58MD	BM-08K58ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	20.0	



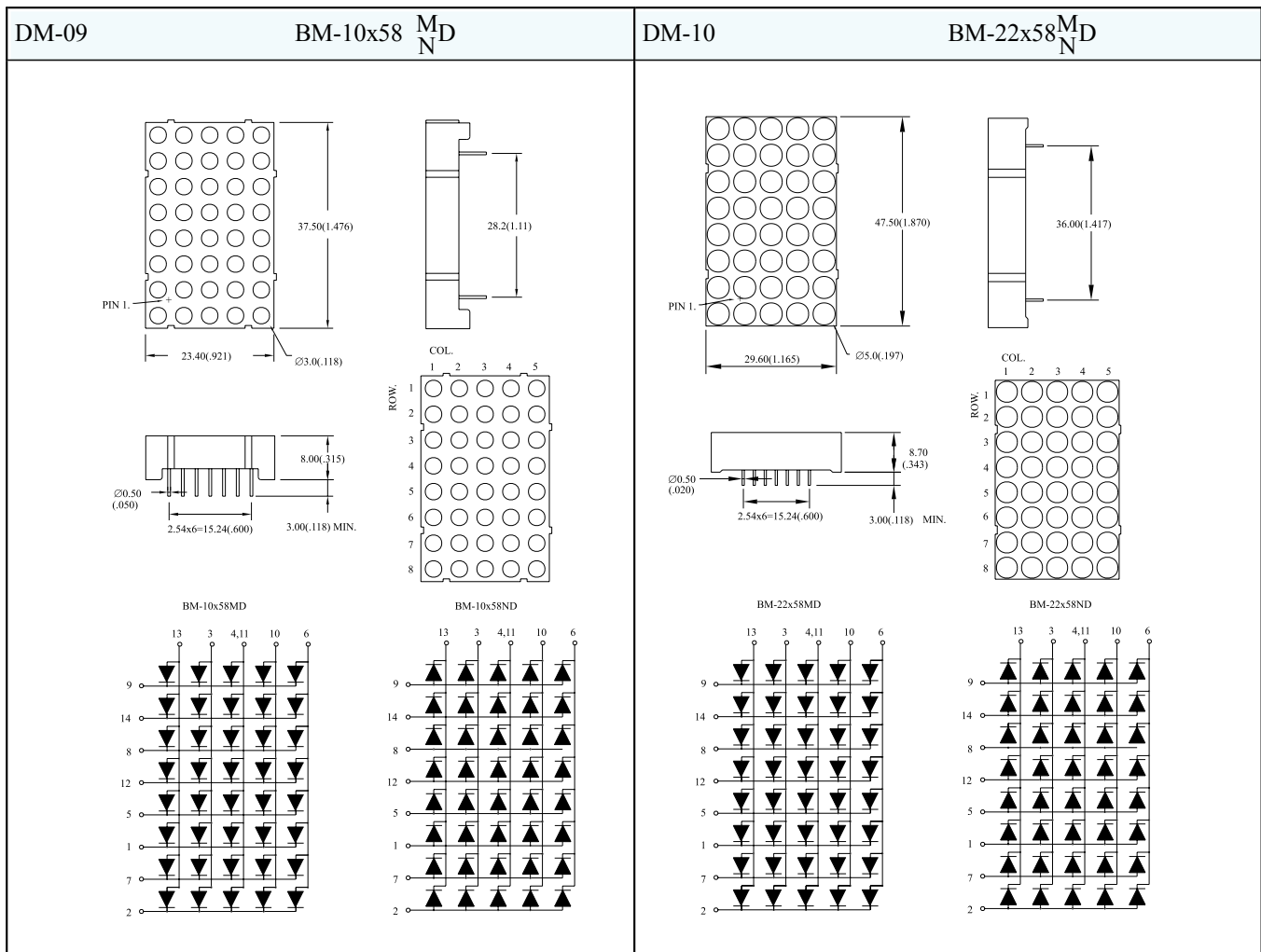
NOTES: 1.ALL Dimensions are in millimeters(inches).
3.Specifications are subject to change without notice.

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



LED Dot Matrix Display 5 x 8 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length λ_p (nm)	$\Delta\lambda$ (nm)	Pd (mw)	If (mA)	I _{fp} (mA)	V _f (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.50" High Ø3.0	BM-10258MD	BM-10258ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	DM-09
	BM-10458MD	BM-10458ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	BM-10458MA	BM-10458NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	BM-10658MD	BM-10658ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	13.0	
	BM-10658MA	BM-10658NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	17.0	
	BM-10F58MD	BM-10F58ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	20.0	
	BM-10J58MD	BM-10J58ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	22.0	
BM-10K58MD	BM-10K58ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	22.0		
1.90" High Ø5.0	BM-22258MD	BM-22258ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	DM-10
	BM-22458MD	BM-22458ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	
	BM-22458MA	BM-22458NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	
	BM-22658MD	BM-22658ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	18.0	
	BM-22658MA	BM-22658NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	25.0	
	BM-22F58MD	BM-22F58ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	BM-22J58MD	BM-22J58ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
BM-22K58MD	BM-22K58ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0		



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

3.Specifications are subject to change without notice.

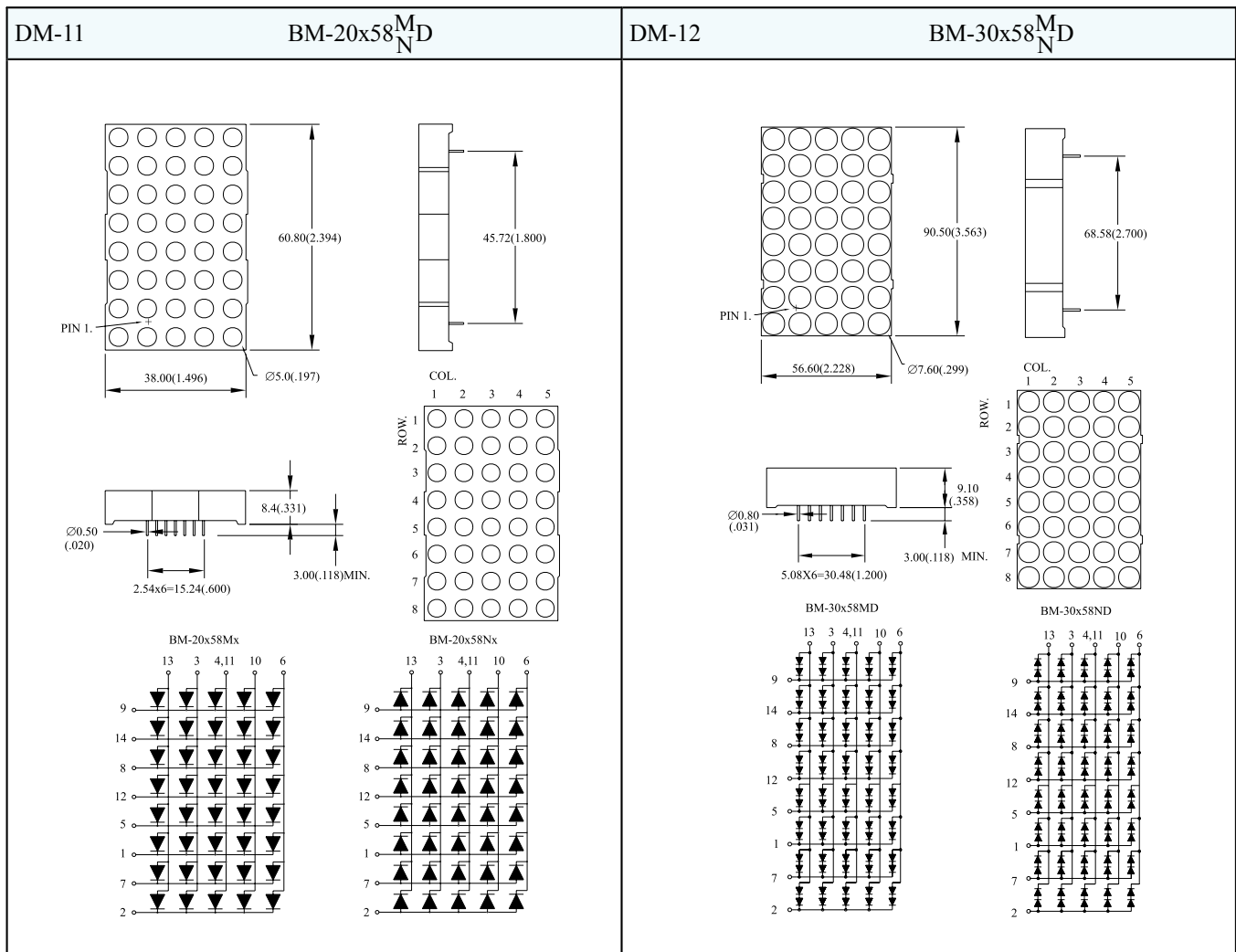
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 5 x 8 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
2.30" High $\varnothing 5.0$	BM-20258MD	BM-20258ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	DM-11
	BM-20458MD	BM-20458ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	
	BM-20458MA	BM-20458NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	
	BM-20658MD	BM-20658ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	18.0	
	BM-20658MA	BM-20658NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	25.0	
	BM-20F58MD	BM-20F58ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	BM-20J58MD	BM-20J58ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
	BM-20K58MD	BM-20K58ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0	
3.50" High $\varnothing 7.6$	BM-30258MD	BM-30258ND	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	12.0	DM-12
	BM-30458MD	BM-30458ND	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	12.0	
	BM-30458MA	BM-30458NA	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	16.0	
	BM-30658MD	BM-30658ND	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	20.0	
	BM-30658MA	BM-30658NA	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	25.0	
	BM-30F58MD	BM-30F58ND	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	25.0	
	BM-30J58MD	BM-30J58ND	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	26.0	
	BM-30K58MD	BM-30K58ND	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	26.0	

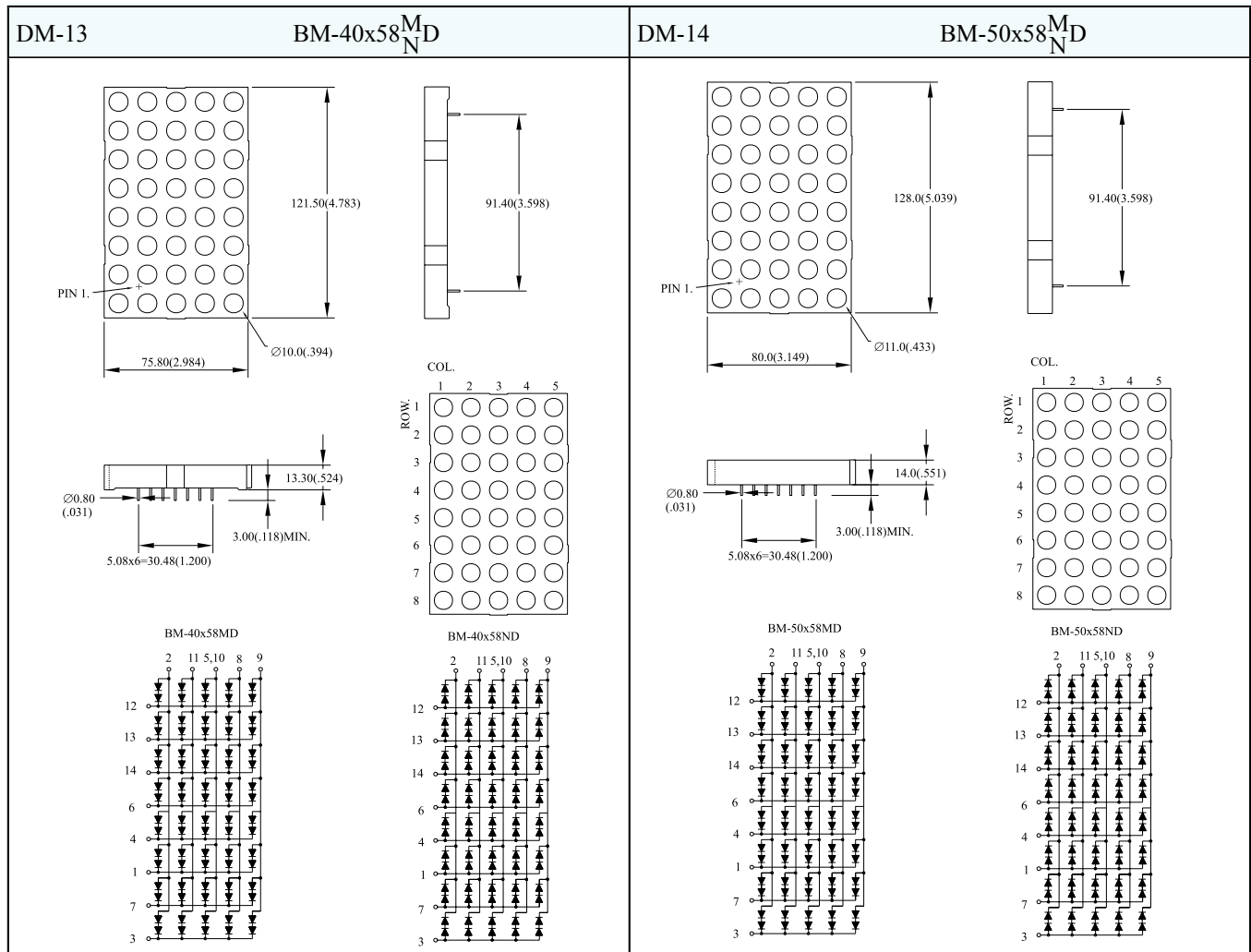


NOTES: 1.ALL Dimensions are in millimeters(inches).
 2.Tolerance is ± 0.25 mm(.010")
 3.Specifications are subject to change without notice.
 4.NP:No Pin. 5.NC:No Connect



LED Dot Matrix Display 5 x 8 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
4.78" High Ø10.0	BM-40258MD	BM-40258ND	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	12.0	DM-13
	BM-40458MD	BM-40458ND	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	12.0	
	BM-40458MA	BM-40458NA	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	16.0	
	BM-40658MD	BM-40658ND	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	20.0	
	BM-40658MA	BM-40658NA	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	25.0	
	BM-40F58MD	BM-40F58ND	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	25.0	
	BM-40J58MD	BM-40J58ND	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	26.0	
BM-40K58MD	BM-40K58ND	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	26.0		
5.00" High Ø11.0	BM-50258MD	BM-50258ND	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	12.0	DM-14
	BM-50458MD	BM-50458ND	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	12.0	
	BM-50458MA	BM-50458NA	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	16.0	
	BM-50658MD	BM-50658ND	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	20.0	
	BM-50658MA	BM-50658NA	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	25.0	
	BM-50F58MD	BM-50F58ND	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	25.0	
	BM-50J58MD	BM-50J58ND	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	26.0	
BM-50K58MD	BM-50K58ND	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	26.0		



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

3.Specifications are subject to change without notice.

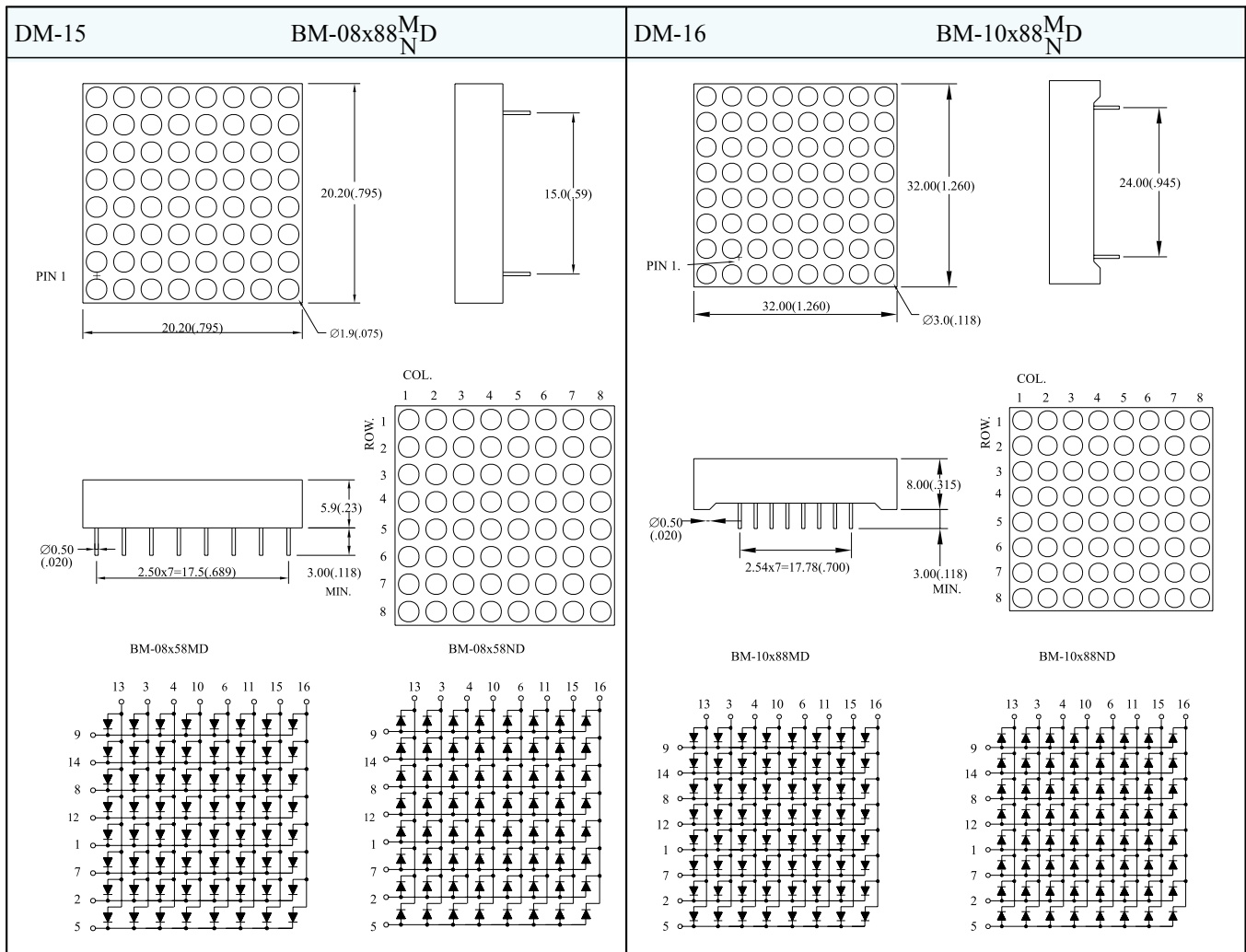
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 8 x 8 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
0.80" High Ø1.9	BM-08288MD	BM-08288ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	DM-15
	BM-08488MD	BM-08488ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	BM-08488MA	BM-08488NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	BM-08688MD	BM-08688ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	12.0	
	BM-08688MA	BM-08688NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	16.0	
	BM-08F88MD	BM-08F88ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	18.0	
	BM-08J88MD	BM-08J88ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	20.0	
	BM-08K88MD	BM-08K88ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	20.0	
1.20" High Ø3.0	BM-10288MD	BM-10288ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	DM-16
	BM-10488MD	BM-10488ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	BM-10488MA	BM-10488NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	14.0	
	BM-10688MD	BM-10688ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	14.0	
	BM-10688MA	BM-10688NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	18.0	
	BM-10F88MD	BM-10F88ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	20.0	
	BM-10J88MD	BM-10J88ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	22.0	
	BM-10K88MD	BM-10K88ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	22.0	



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

3.Specifications are subject to change without notice.

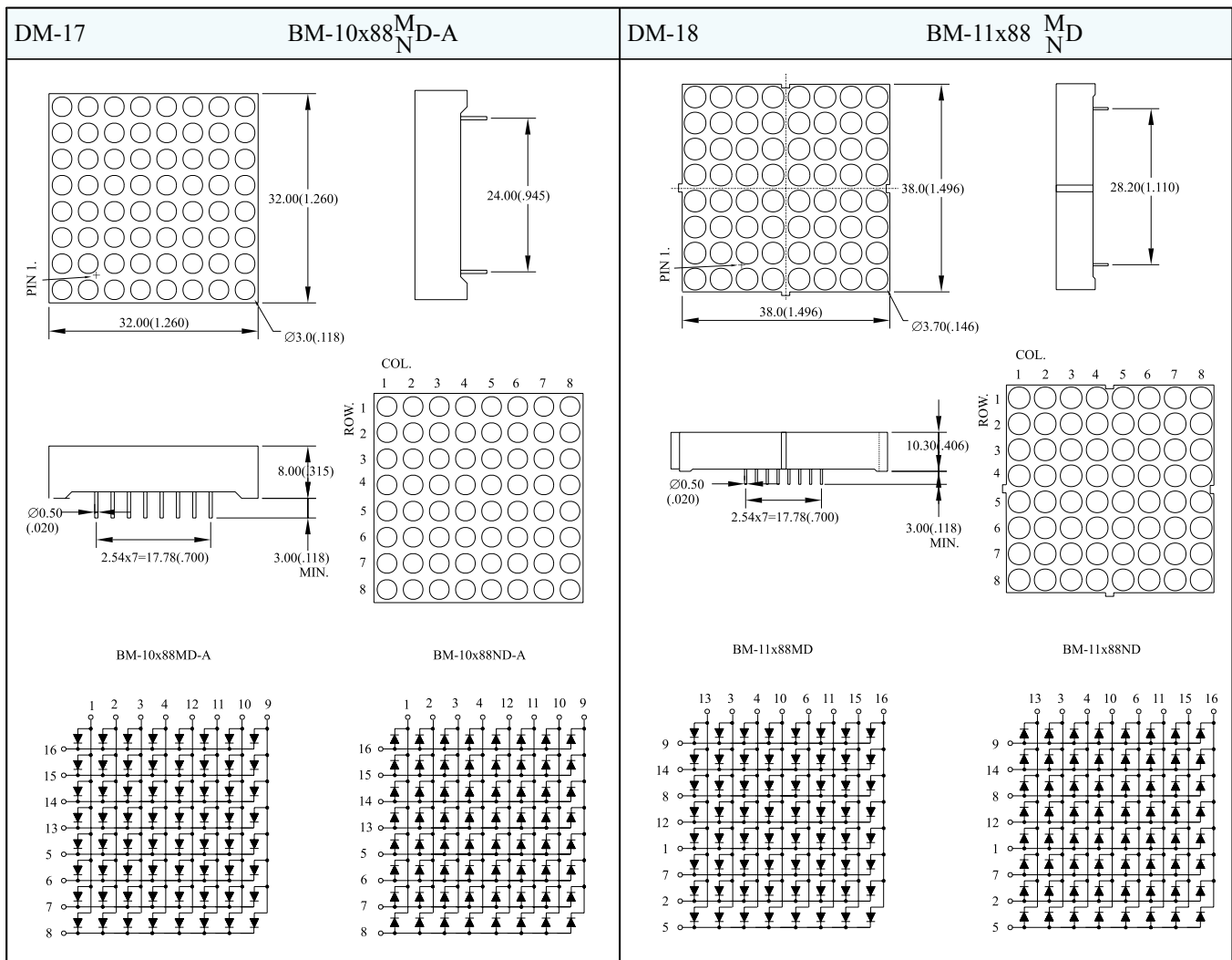
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 8 x 8 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
1.20" High Ø3.0	BM-10288MD-A	BM-10288ND-A	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	DM-17
	BM-10488MD-A	BM-10488ND-A	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	BM-10488MA-A	BM-10488NA-A	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	14.0	
	BM-10688MD-A	BM-10688ND-A	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	14.0	
	BM-10688MA-A	BM-10688NA-A	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	18.0	
	BM-10F88MD-A	BM-10F88ND-A	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	20.0	
	BM-10J88MD-A	BM-10J88ND-A	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	22.0	
	BM-10K88MD-A	BM-10K88ND-A	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	22.0	
1.50" High Ø3.7	BM-11288MD	BM-11288ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	DM-18
	BM-11488MD	BM-11488ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	
	BM-11488MA	BM-11488NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	
	BM-11688MD	BM-11688ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	15.0	
	BM-11688MA	BM-11688NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	19.0	
	BM-11F88MD	BM-11F88ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	21.0	
	BM-11J88MD	BM-11J88ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	23.0	
	BM-11K88MD	BM-11K88ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	23.0	



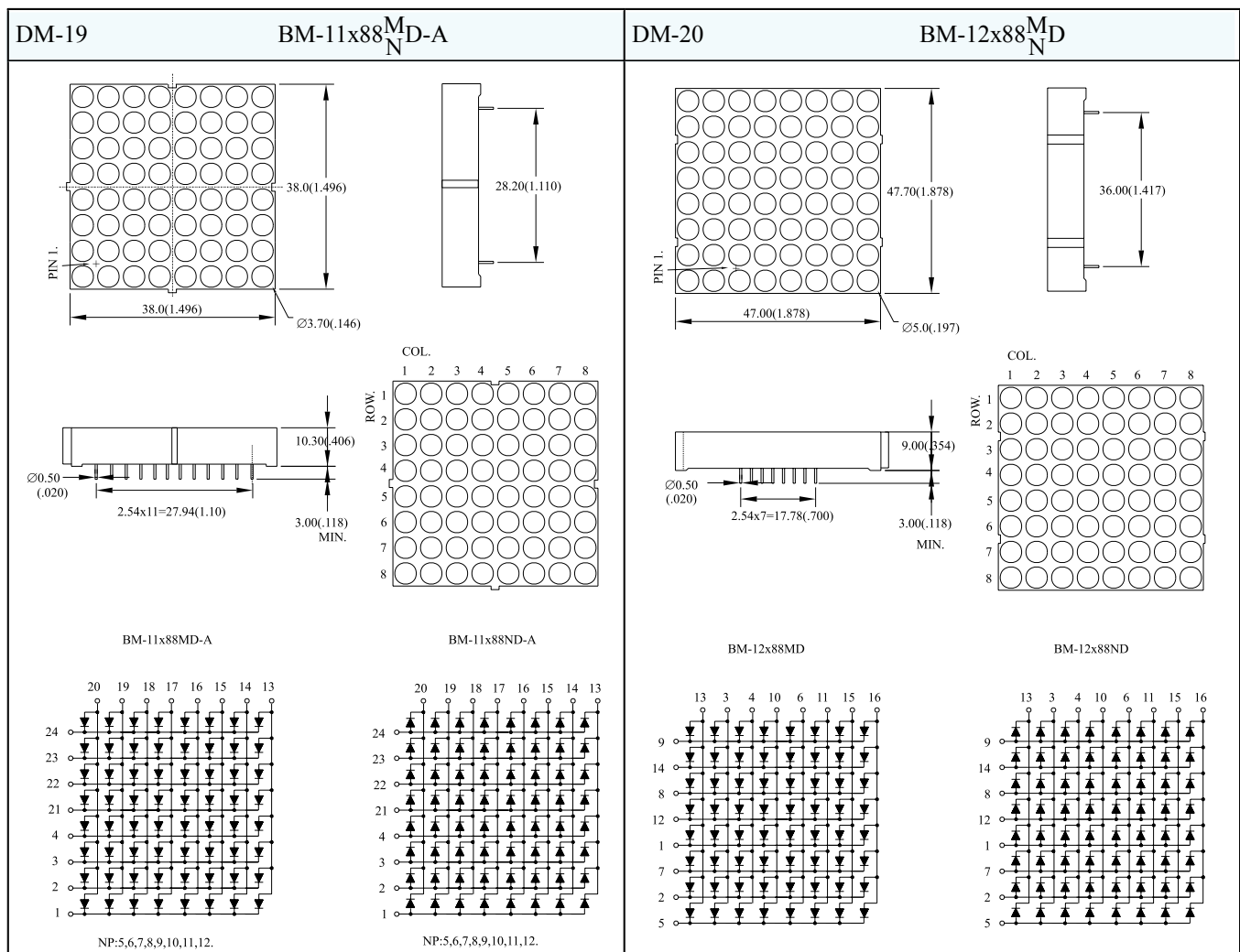
NOTES: 1.ALL Dimensions are in millimeters(inches).
3.Specifications are subject to change without notice.

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



LED Dot Matrix Display 8 x 8 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
1.50" High Ø3.7	BM-11288MD-A	BM-11288ND-A	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	DM-19
	BM-11488MD-A	BM-11488ND-A	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	
	BM-11488MA-A	BM-11488NA-A	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	
	BM-11688MD-A	BM-11688ND-A	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	15.0	
	BM-11688MA-A	BM-11688NA-A	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	19.0	
	BM-11F88MD-A	BM-11F88ND-A	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	21.0	
	BM-11J88MD-A	BM-11J88ND-A	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	23.0	
	BM-11K88MD-A	BM-11K88ND-A	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	23.0	
1.90" High Ø5.0	BM-12288MD	BM-12288ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DM-20
	BM-12488MD	BM-12488ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	BM-12488MA	BM-12488NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	17.0	
	BM-12688MD	BM-12688ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	17.0	
	BM-12688MA	BM-12688NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	21.0	
	BM-12F88MD	BM-12F88ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	BM-12J88MD	BM-12J88ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
	BM-12K88MD	BM-12K88ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0	



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

3.Specifications are subject to change without notice.

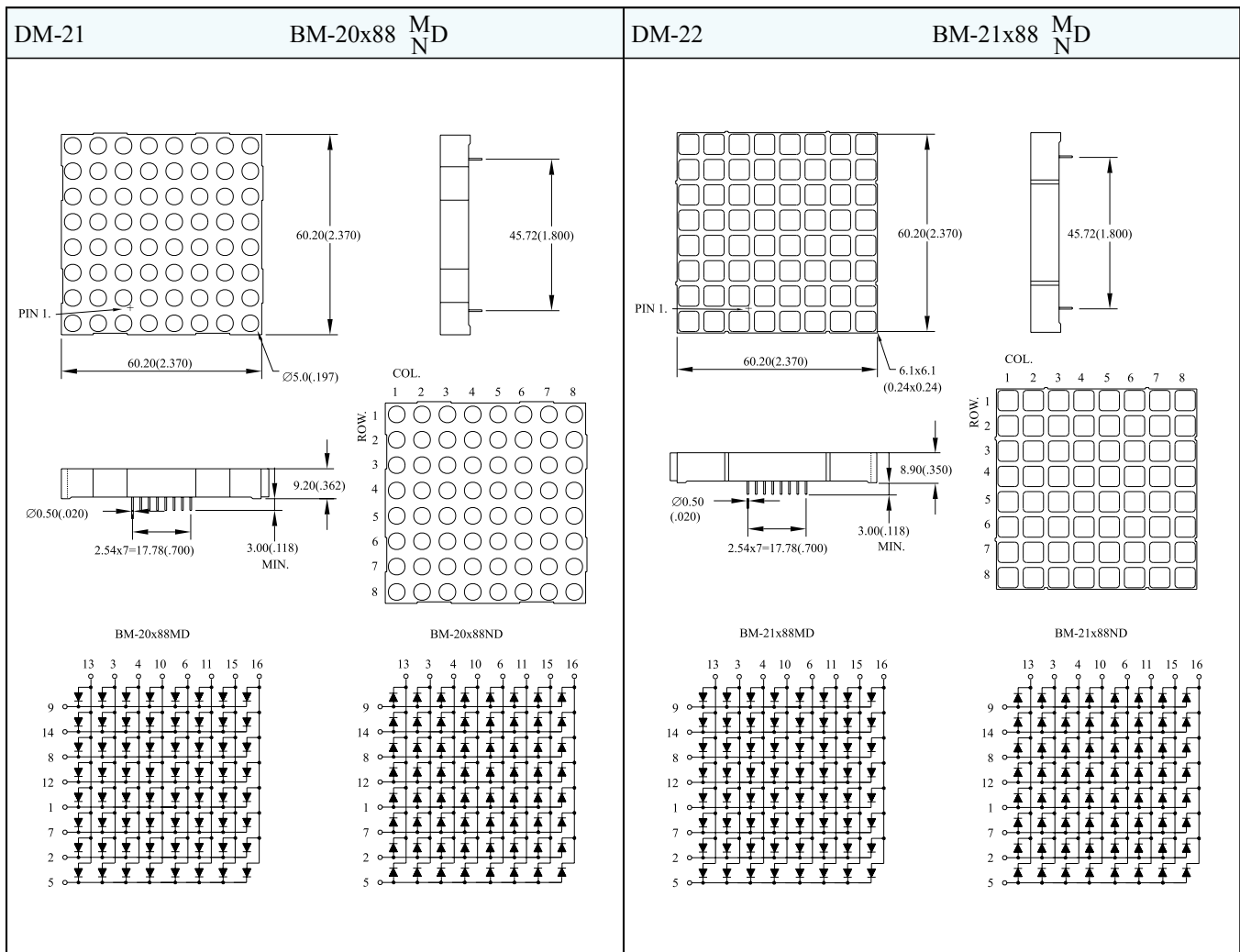
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 8 x 8 Single Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length λ_p (nm)	$\Delta\lambda$ (nm)	Pd (mw)	If (mA)	I _{fp} (mA)	V _f (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.30" High Ø 5.0	BM-20288MD	BM-20288ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DM-21
	BM-20488MD	BM-20488ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	BM-20488MA	BM-20488NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	17.0	
	BM-20688MD	BM-20688ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	17.0	
	BM-20688MA	BM-20688NA	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	21.0	
	BM-20F88MD	BM-20F88ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	BM-20J88MD	BM-20J88ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
BM-20K88MD	BM-20K88ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0		
2.3" High 6.1x6.1	BM-21288MD	BM-21288ND	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DM-22
	BM-21488MD	BM-21488ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	BM-21488MA	BM-21488NA	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	17.0	
	BM-21688MD	BM-21688ND	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	17.0	
	BM-21688MA	BM-21688NA	GaAlAs/ SH/ Super Red	660	20	80	30 <td 150	1.7	2.5	21.0		
	BM-21F88MD	BM-21F88ND	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	BM-21J88MD	BM-21J88ND	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
BM-21K88MD	BM-21K88ND	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0		

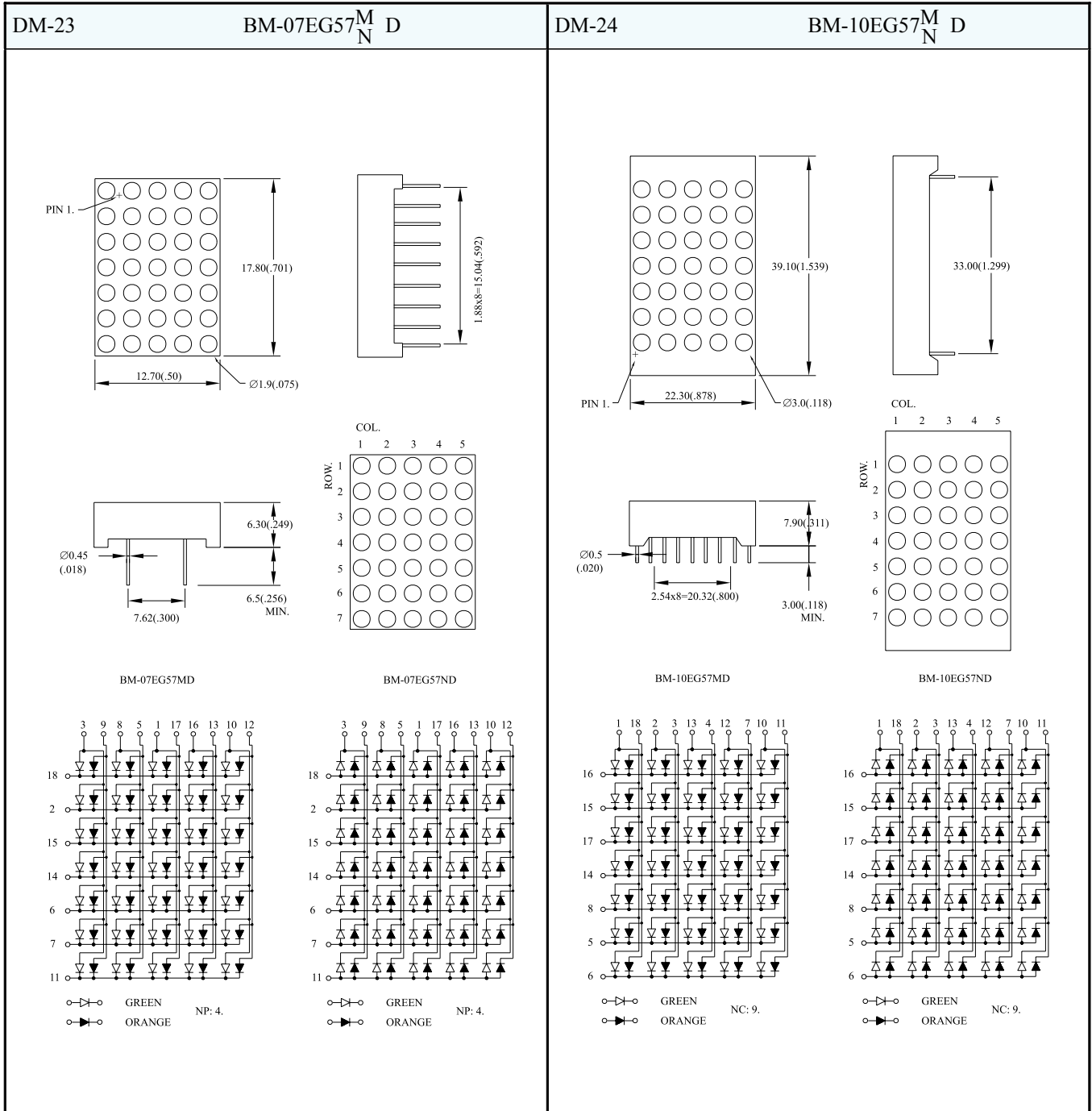


NOTES: 1.ALL Dimensions are in millimeters(inches).
 2.Tolerance is±0.25mm(.010")
 3.Specifications are subject to change without notice.
 4.NP:No Pin. 5.NC:No Connect



LED Dot Matrix Display 5 x 7 Multi-Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
0.70" High Ø1.90	BM-07EG57MD	BM-07EG57ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	DM-23
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	
1.20" High Ø3.00	BM-10EG57MD	BM-10EG57ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	DM-24
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	



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

3.Specifications are subject to change without notice.

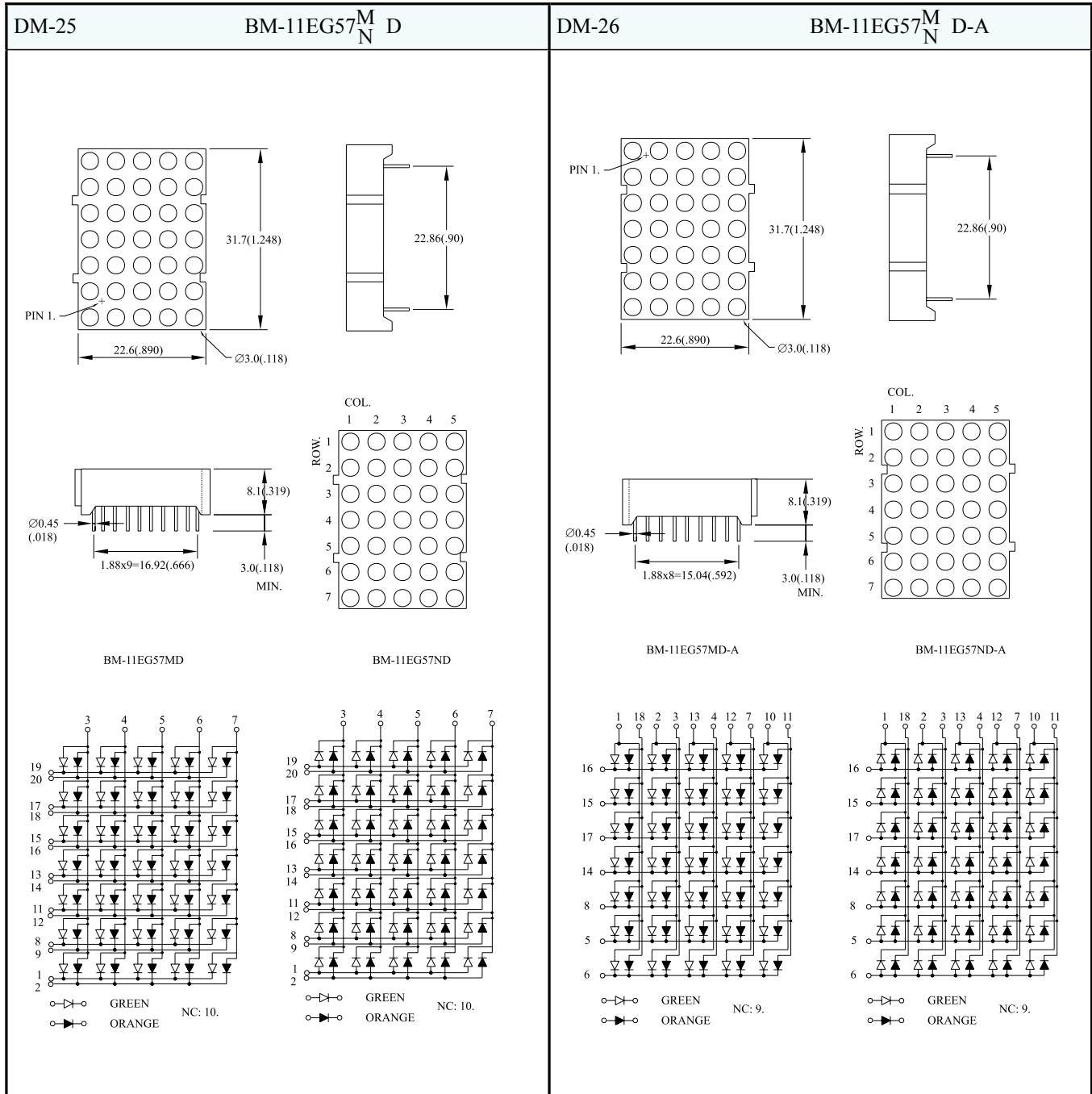
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 5 x 7 Multi-Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
1.25" High Ø3.00	BM-11EG57MD	BM-11EG57ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	DM-25
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	
1.25" High Ø3.00	BM-11EG57MD-A	BM-11EG57ND-A	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	DM-26
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	



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

3.Specifications are subject to change without notice.

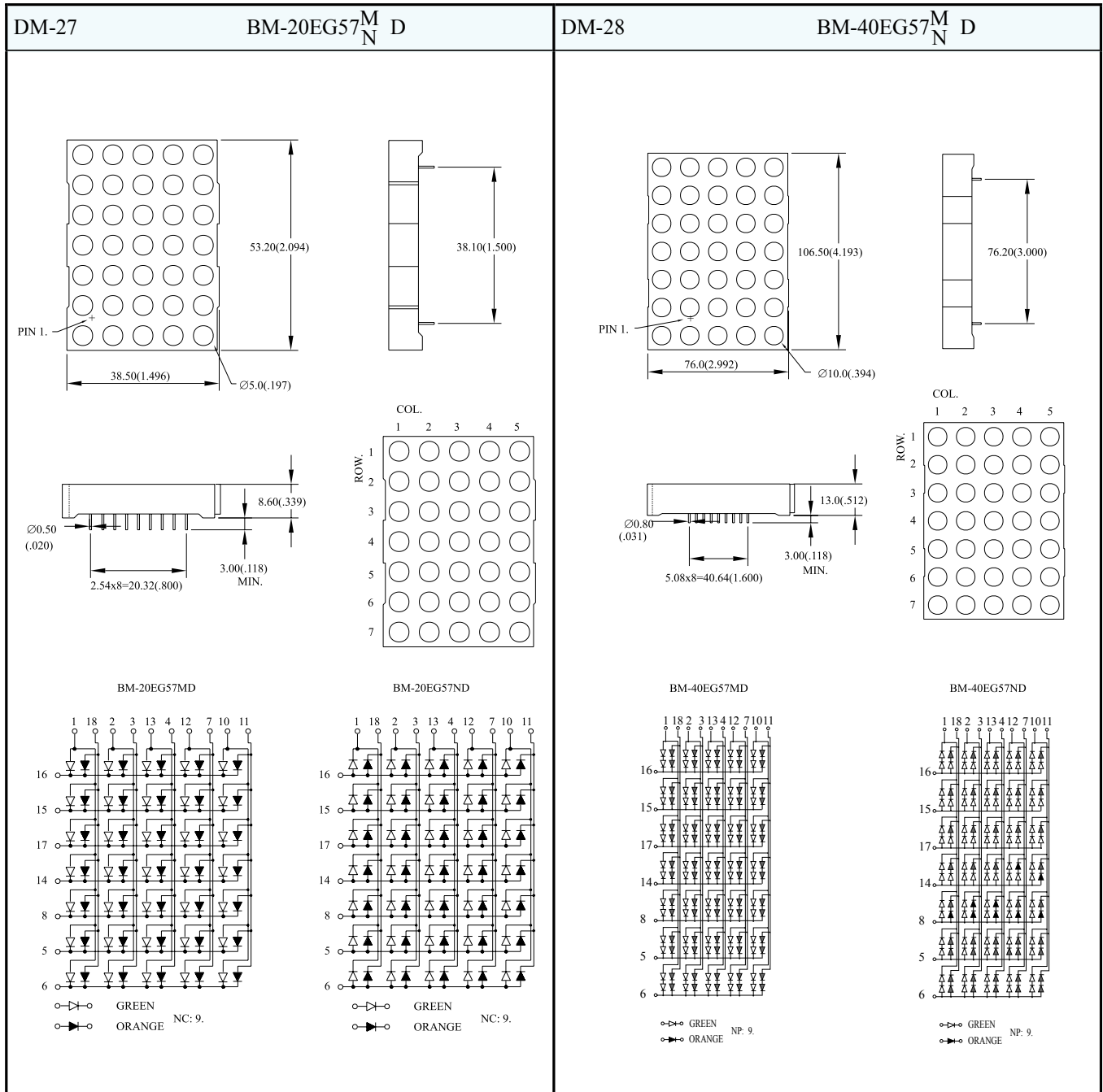
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 5 x 7 Multi-Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
2.10" High Ø5.00	BM-20EG57MD	BM-20EG57ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	DM-27
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	
4.00" High Ø10.0	BM-40EG57MD	BM-40EG57ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DM-28
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	



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

3.Specifications are subject to change without notice.

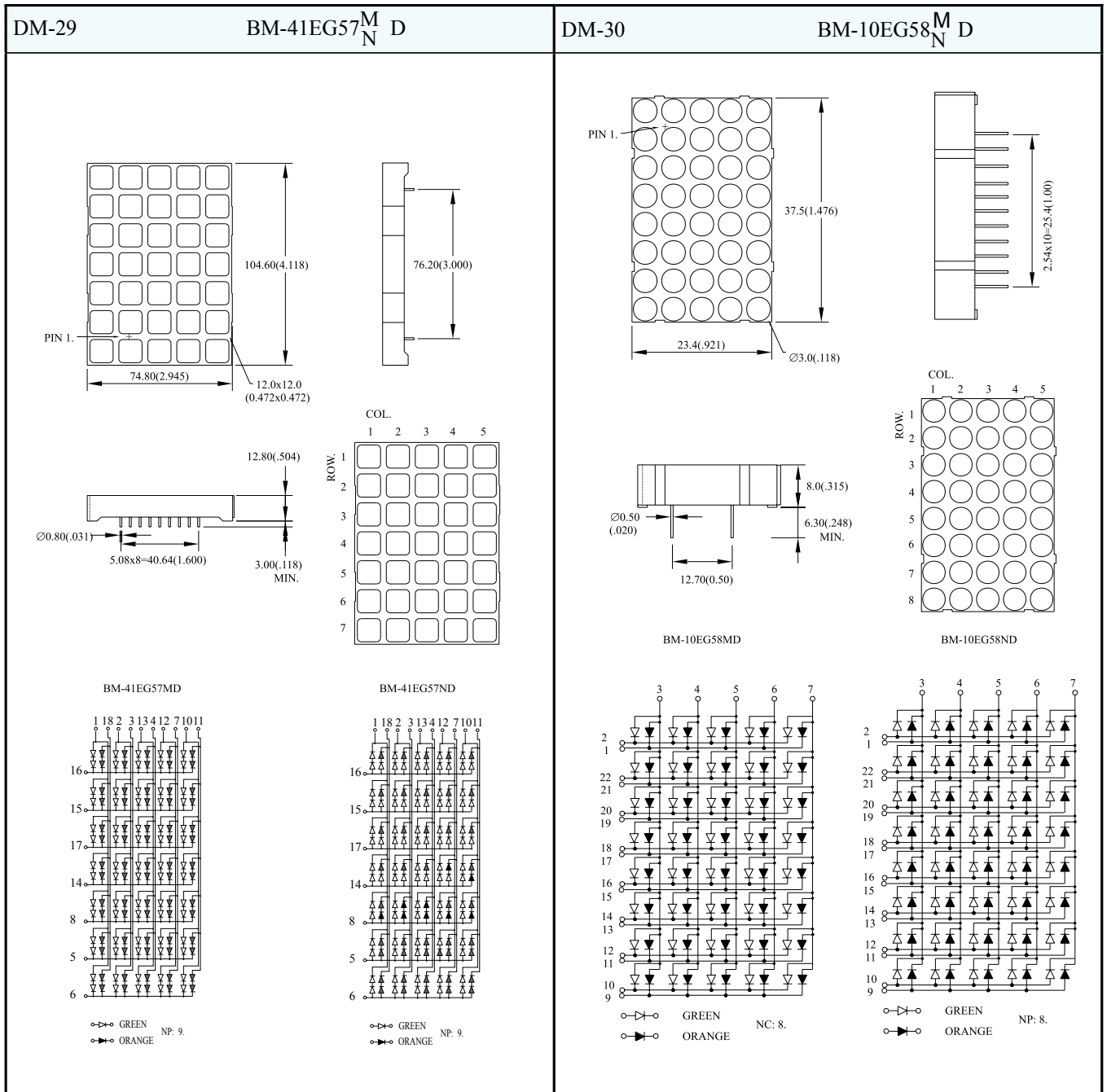
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 5 x 7, 5 x 8 Multi-Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
4.00" High 12x12	BM-41EG57MD	BM-41EG57ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DM-29
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	
1.4" High \varnothing 3.00	BM-10EG58MD	BM-10EG58ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	DM-30
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	



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

3.Specifications are subject to change without notice.

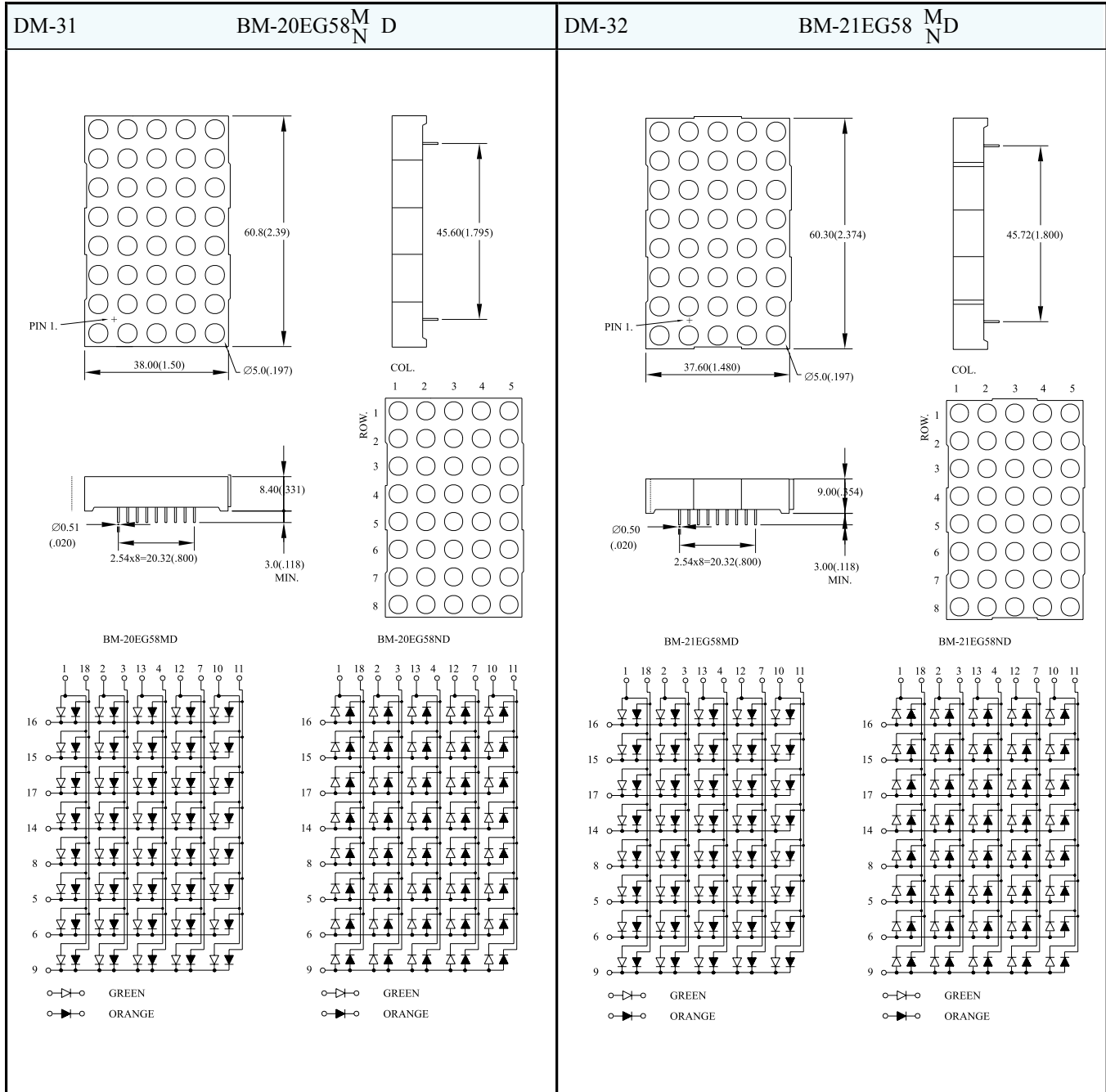
2.Tolerance is \pm 0.25mm(.010")

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



LED Dot Matrix Display 5 x 8 Multi-Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
2.40" High Ø5.00	BM-20EG58MD	BM-20EG58ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	DM-31
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	
2.37" High Ø5.00	BM-21EG58MD	BM-21EG58ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	DM-32
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	



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

3.Specifications are subject to change without notice.

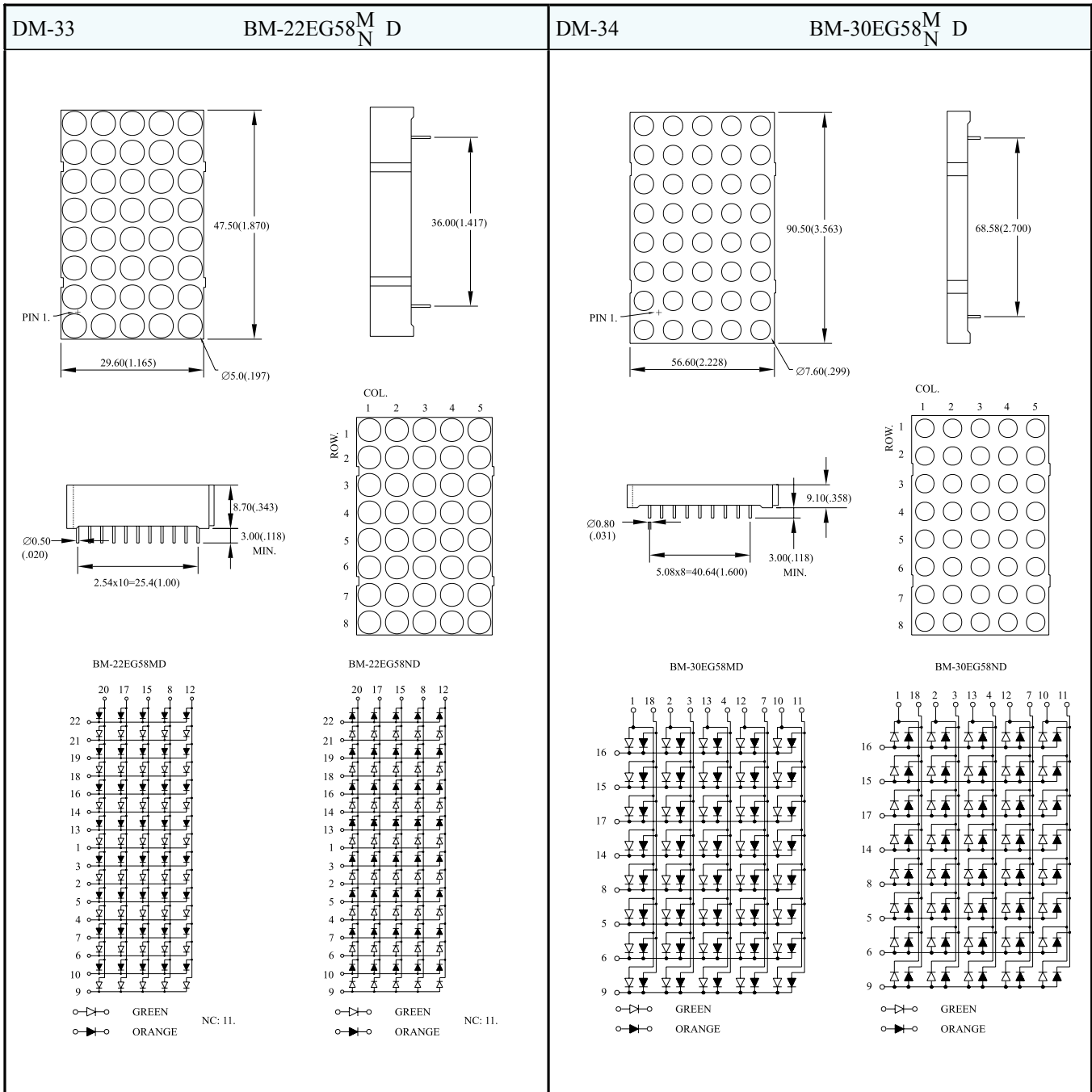
2.Tolerance is±0.25mm(.010")

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



LED Dot Matrix Display 5 x 8 Multi-Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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. (med)	
									Typ.	Max.		
1.90" High Ø5.00	BM-22EG58MD	BM-22EG58ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	DM-33
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	
3.50" High Ø 7.60	BM-30EG58MD	BM-30EG58ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DM-34
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	



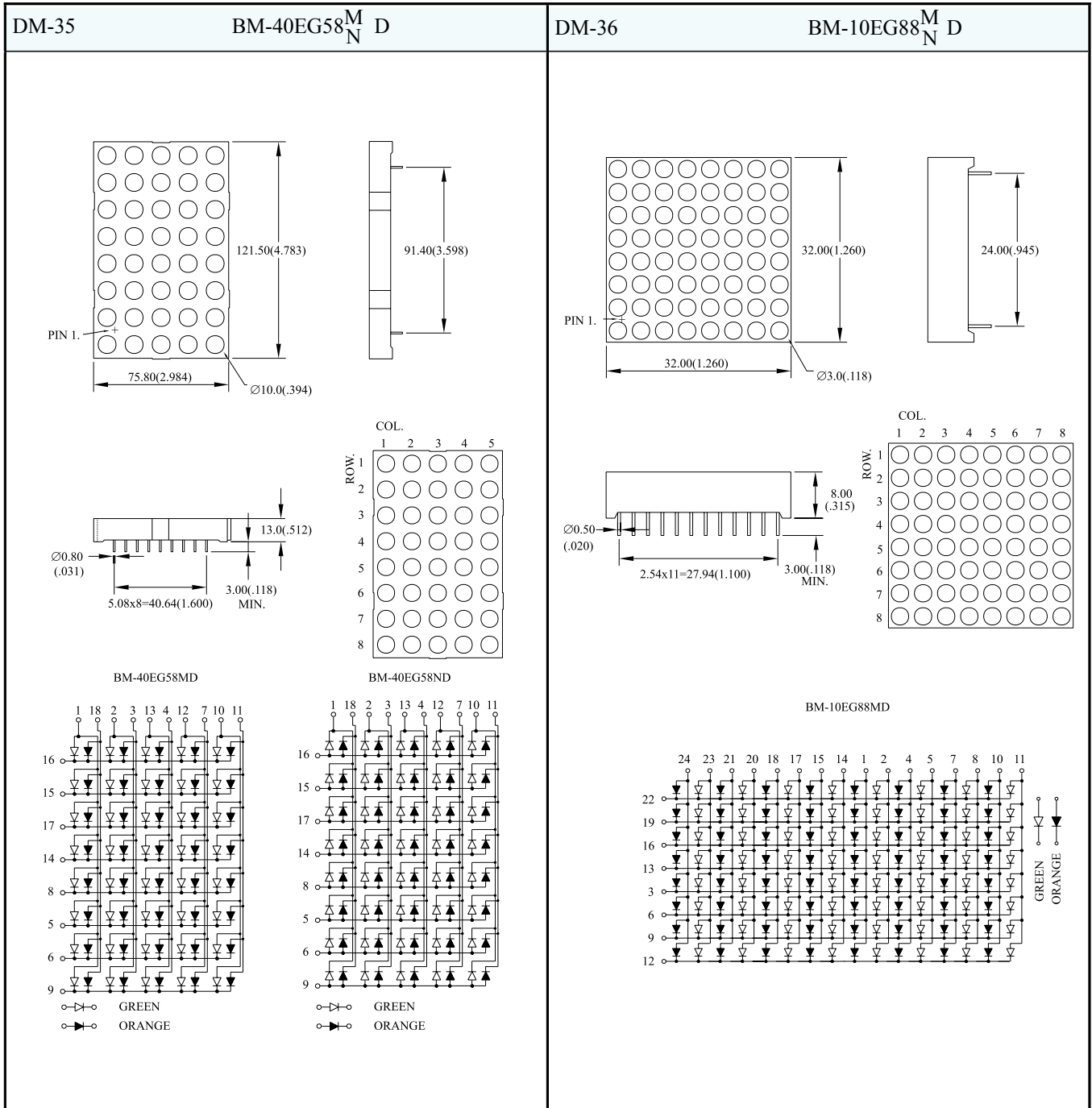
NOTES: 1. ALL Dimensions are in millimeters(inches).
 3. Specifications are subject to change without notice.

2. Tolerance is $\pm 0.25\text{mm} (.010")$
 4. NP: No Pin. 5. NC: No Connect



LED Dot Matrix Display 5 x 8, 8 x 8 Multi-Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
4.60" High Ø10.0	BM-40EG58MD	BM-40EG58ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DM-35
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	
1.25" High Ø3.00	BM-10EG88MD	BM-10EG88ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	DM-36
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	



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



LED Dot Matrix Display 8 x 8, 16 x 16 Multi-Color

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column 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.		
2.30" High $\varnothing 5.0$	BM-20EG88MD	BM-20EG88ND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DM-37
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	
2.50" High $\varnothing 3.0$		BM-25EGAAND	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	DM-38
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	

DM-37 BM-20EG88 M_D N_D

BM-20EG88MD

DM-38 BM-25EGAAND

BM-25EGAAND

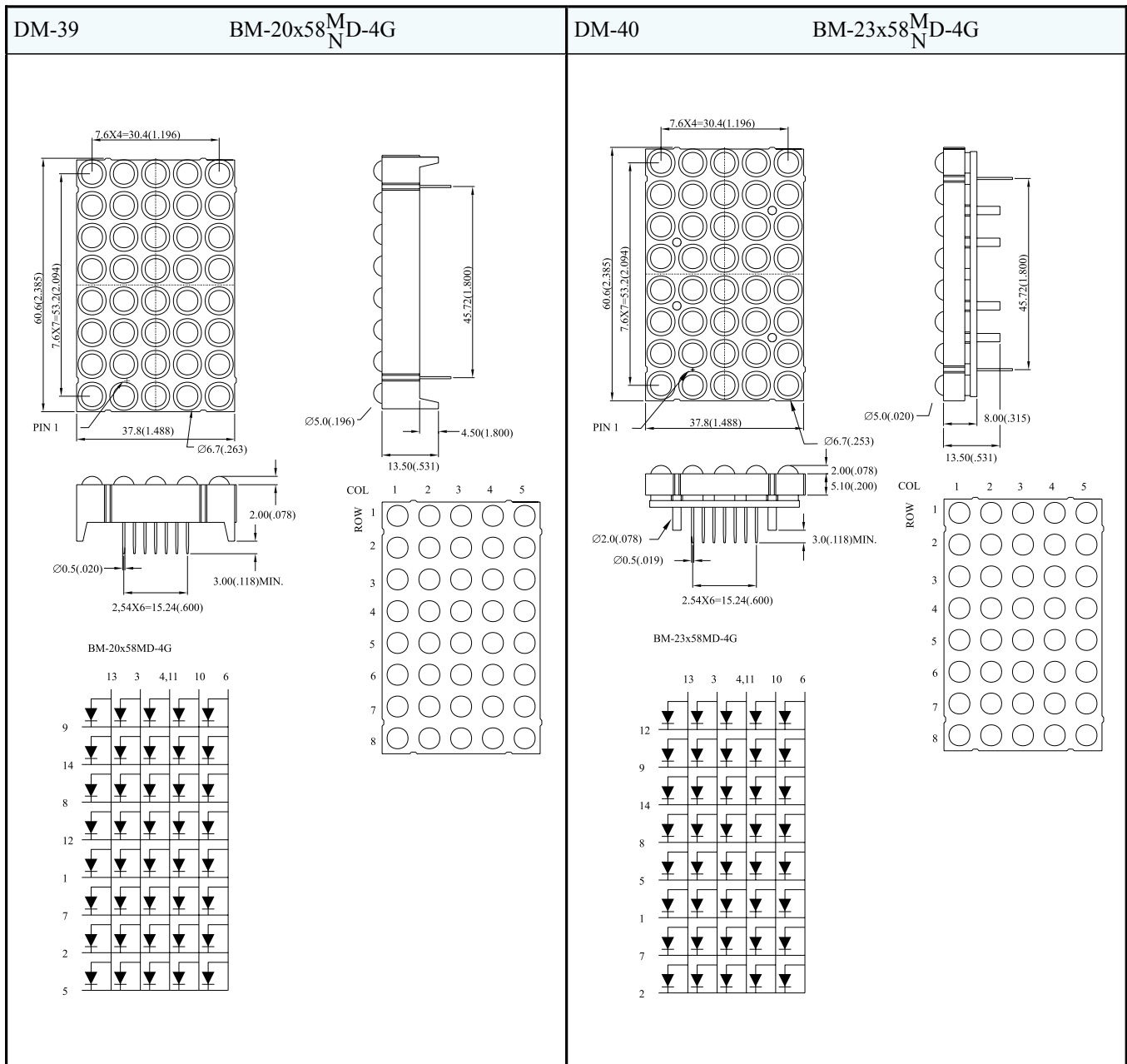
NOTES: 1.ALL Dimensions are in millimeters(inches).
3.Specifications are subject to change without notice.

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



LED Dot Matrix Display 5 x 8 Single-Color

Digit Size	Part No.		Chip	Absolute Maximum Ratings					Electro-optical Data (At 10mA)		Drawing No.	
	Column Common Anode	Column 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.		
2.30" High Ø 5.0	BM-20458MD-4G	BM-20458ND-4G	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	200	DM-39
	BM-20258MD-4G	BM-20258ND-4G	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	200	
	BM-20D58MD-4G	BM-20D58ND-4G	GaAlAs/DH / Super Red	660	20	80	30	150	1.7	2.5	450	
	BM-20F58MD-4G	BM-20F58ND-4G	GaAlAs/DDH /Super Red	660	20	80	30	150	2.0	2.5	800	
2.50" High Ø 5.0	BM-23458MD-4G	BM-23458ND-4G	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	200	DM-40
	BM-23258MD-4G	BM-23258ND-4G	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	200	
	BM-23D58MD-4G	BM-23D58ND-4G	GaAlAs/DH / Super Red	660	20	80	30	150	1.7	2.5	450	
	BM-23F58MD-4G	BM-23F58ND-4G	GaAlAs/DDH /Super Red	660	20	80	30	150	2.0	2.5	800	



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