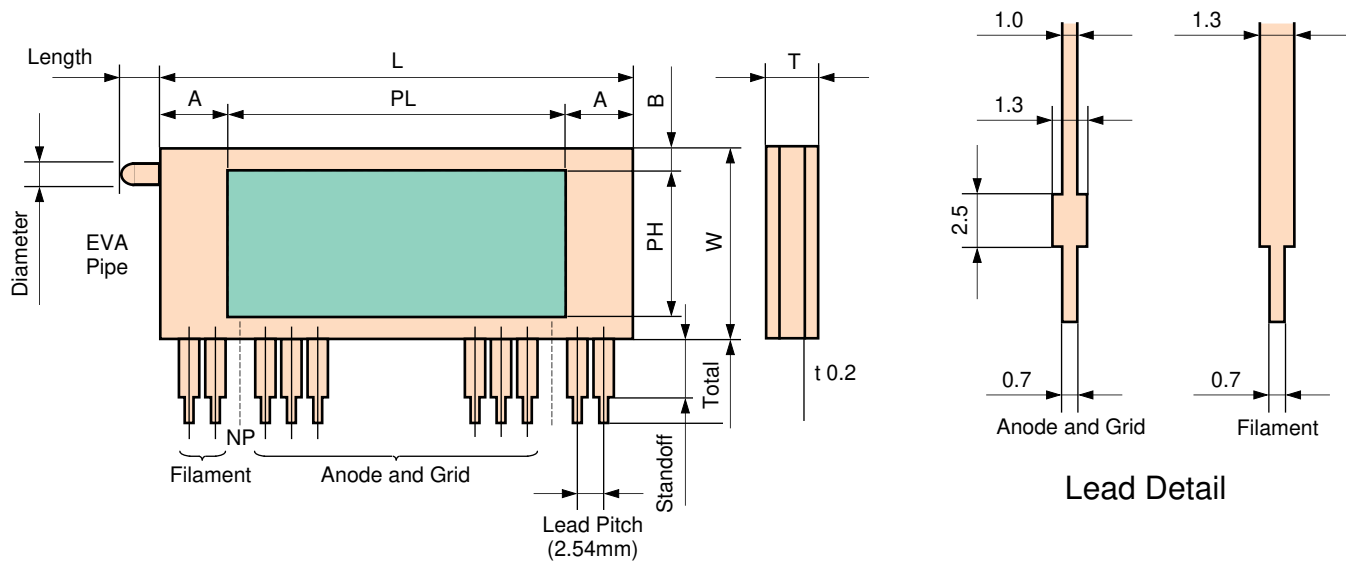


Alphanumeric Type for Digital Clocks, Timers, and Measuring Meters

Type No.	No. of Digits	Character Format, Symbol	Character Dimensions		Outline Dimensions				
			C.H (mm)	C.W (mm)	P.H (mm)	P.L (mm)	P.T (mm)	L.P (mm)	L.L (mm)
FIP4D15	4		15.0	8.4	33.0±1.0	98.0±1.0	8.0±0.7	2.54	11.0
FIP4F8CS	4		7.6	3.6	24.5±1.0	55.4±1.0	6.5±0.7	2.54	8.7
FIP4H5	4		5.0	2.5	14.5±1.0	41.0±1.0	6.5±0.7	2.54	8.0
FIP4Q8A	4		8.0	5.0	24.5±1.0	59.0±1.0	6.5±0.7	2.54	11.0
FIP5B15B	5		15.0	8.0	33.0±1.0	98.0±1.0	8.0±0.7	2.54	6.2
FIP5D8BS	5		7.6	3.6	24.5±1.0	55.4±1.0	6.5±0.7	2.54	8.7
FIP6C13E	6		12.5	6.8	33.0±1.0	98.0±1.0	8.0±0.7	4.0	10.5
FIP6C15E	6		15.0	8.0	33.0±1.0	110.0±1.0	8.0±0.7	4.0	10.5
FIP6D15C	6		15.0	7.5	33.0±1.0	98.0±1.0	8.0±0.7	2.54	15.0
FIP6D15D	6		15.0	7.5	33.0±1.0	98.0±1.0	8.0±0.7	2.54	6.5
FIP6F13A	6		12.5	6.8	33.0±1.0	98.0±1.0	8.0±0.7	2.54	5.2
FIP7B13	7		13.0	6.0	33.0±1.0	98.0±1.0	8.0±0.7	2.54	7.4
FIP7B25A	7		25.4	12.0	48.0±1.0	164.0±1.0	10.5±0.7	4.0	10.5
FIP7P8C	7		8.0	4.6	24.5±1.0	76.0±1.0	6.1±0.7	2.54	7.5

Package No.	Recommended Electrical Ratings									L	
	Filament	Ef (V rms)	If (mA rms)	Operation	eb = ec (Vp-p) *Eb = Ec (Vdc)	Duty	Ek (Vdc)	ib/dig (mA)	ic/dig (mA)	(cd/m ²)	(fL)
A-6	AC	4.0	95	dynamic	22	1/5	5.5	9.0	10.0	1028	(300)
B-5	DC	1.9	81	static	*12	—	0	1.1	6.0	1370	(400)
A-4	DC	1.5	40	dynamic	22	1/4	2	0.5	1.0	1030	(300)
A-6	AC	2.4	81	dynamic	27	1/7	3.5	3.5	5.0	1030	(300)
C-2	AC	3.6	135	dynamic	43	1/28	5	12.0	15.0	620	(180)
B-5	DC	1.9	80	static	*12	—	0	0.8	6.0	1370	(400)
C-1	AC	3.8	113	dynamic	26	1/7	4	5.0	7.0	685	(200)
C-1	AC	4.1	161	dynamic	30 42	1/7.5	6	10.0 20.0	13.0 25.0	1370 3000	(400) (900)
A-3	AC	3.7	110	dynamic	35	1/16	5	13.0	20.0	1030	(300)
C-2	AC	3.7	110	dynamic	35	1/16	5	13.0	20.0	1030	(300)
C-2	AC	3.2	100	dynamic	42	1/21	4	9.5	11.0	1230	(360)
A-5	AC	3.3	104	dynamic	35	1/19	4	5.5	6.5	860	(250)
C-1	AC	5.5	175	dynamic	34.5	1/7.5	8	17.5	14.0	690	(200)
A-2	AC	2.3	106	dynamic	26	1/7	4	2.5	4.5	1370	(400)

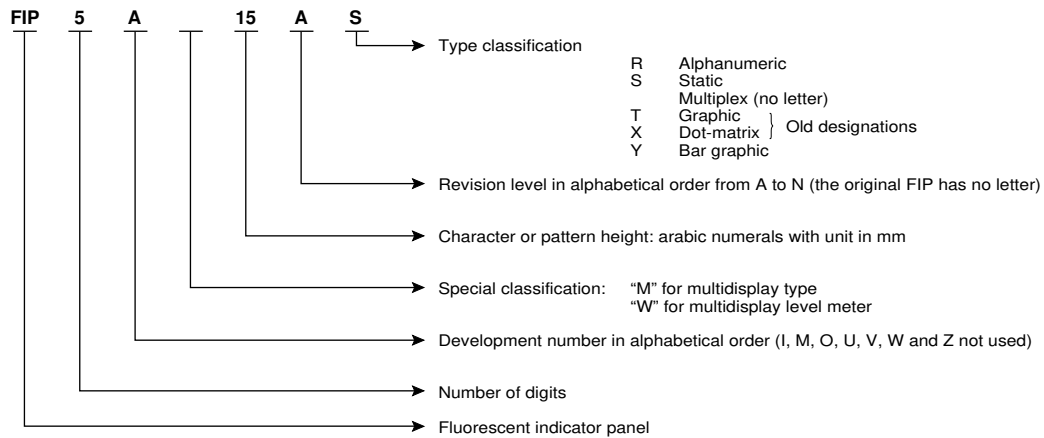
Semicustom FIP Package



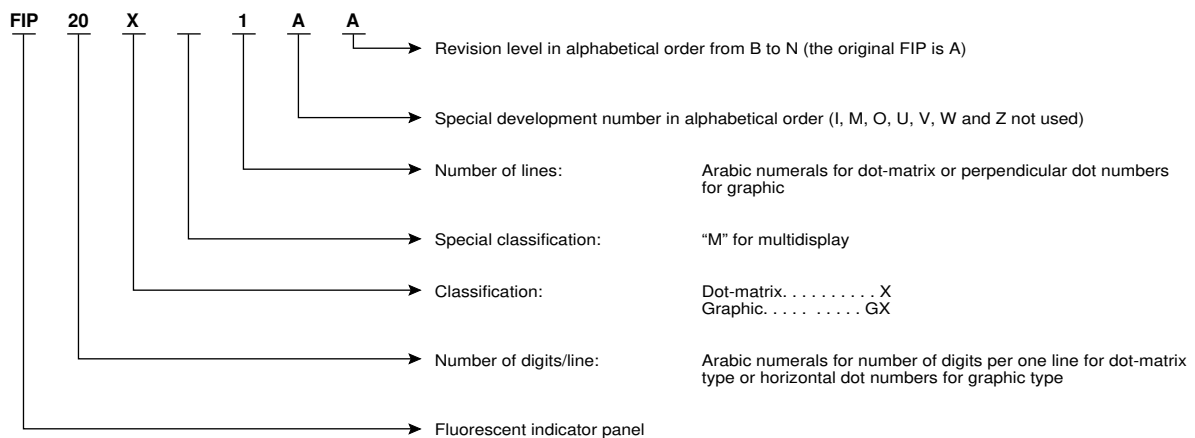
Package List

No.	Package Size (mm)			Max. Graphic Area (mm)		Lead Terminal				EVA Pipe		Relative Position	
	W	L	T	PH	PL	Length (mm)		Number		Length (mm)	Diameter (mm)	A	B
						Total	Standoff	Filament	Anode and Grid				
1	25.0	67.2	6.1	13.5	41.2	15.0	9.5	4	16 max.	6 max.	ø 3 max.	13.0	5.5
2	25.0	98.0	6.1	13.5	72.0	15.0	9.5	4	29 max.	6 max.	ø 3 max.	13.0	5.5
3	25.0	129.0	6.1	13.5	103.0	15.0	9.5	4	41 max.	6 max.	ø 3 max.	13.0	5.5
4	29.0	78.4	7.5	17.0	52.4	15.0	9.5	4	21 max.	9 max.	ø 4 max.	13.0	5.5
5	29.0	98.0	7.5	17.0	72.0	15.0	9.5	4	29 max.	9 max.	ø 4 max.	13.0	5.5
6	29.0	110.2	8.0	17.0	84.2	15.0	9.5	4	33 max.	9 max.	ø 4 max.	13.5	5.5
7	29.0	125.0	8.0	17.0	99.0	15.0	9.5	4	39 max.	9 max.	ø 4 max.	13.5	5.5
8	29.0	135.2	8.0	17.0	109.2	15.0	9.5	4	43 max.	9 max.	ø 4 max.	13.5	5.5
9	33.5	98.0	8.0	21.5	71.0	15.0	9.5	4	29 max.	9 max.	ø 4 max.	13.5	5.5

(1) General



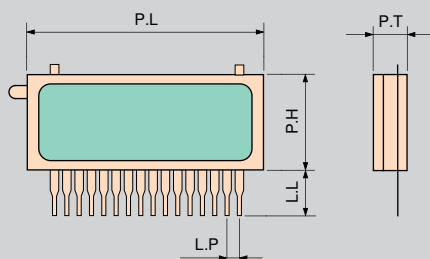
(2) Dot-Matrix and Graphic Types



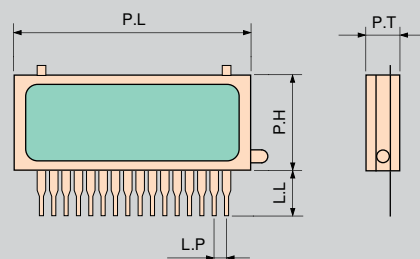
Abbreviations

C.H.	Character height or pattern height	E_b, E_c	DC anode voltage and DC grid voltage
C.W.	Character width or pattern width	Duty	Duty cycle or duty factor
P.H.	Panel height	E_k	Cathode bias voltage or cutoff bias voltage
L.P.	Lead pitch	i_b/dig	Peak anode current per digit or per bar in multiplex operation; DC anode current per digit or per bar in static operation
L.L.	Lead length	i_c/dig	Peak grid current per digit in multiplex operation; DC grid current per panel in static operation
E_f	Filament voltage (AC = unit in V rms; DC = unit in V_{dc})	L	Brightness in cd/m^2 (SI unit) Bright value [cd/m^2] shown in the table is the calculated value according to the equation. $1 [fL] = 3.43 [\text{cd/m}^2]$
I_f	Filament current (AC = unit in mA rms; DC = unit in mA_{dc})		
e_b, e_c	Peak anode voltage and peak grid voltage		

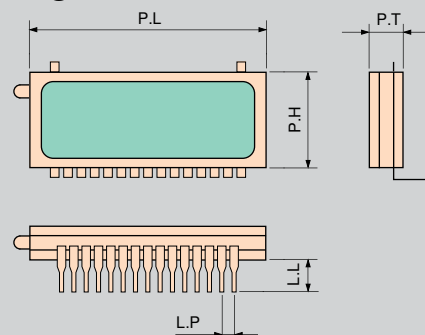
A-1



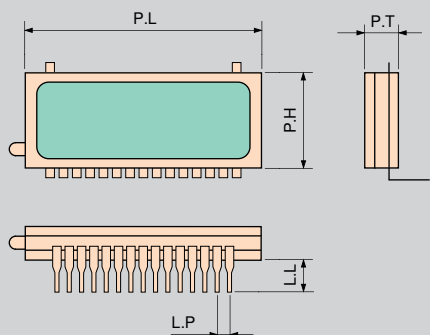
A-2



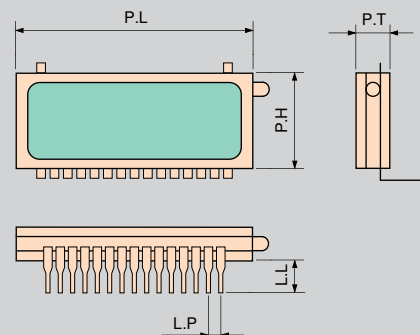
A-3



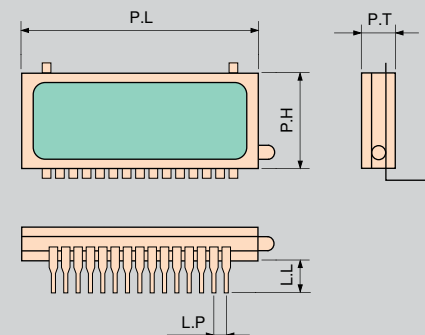
A-4



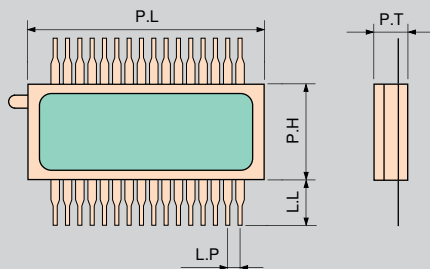
A-5



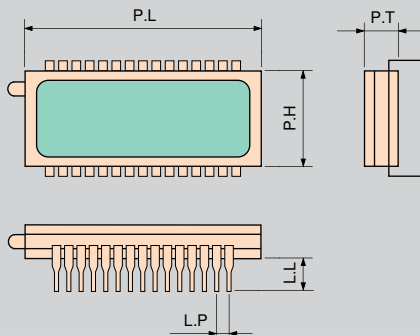
A-6



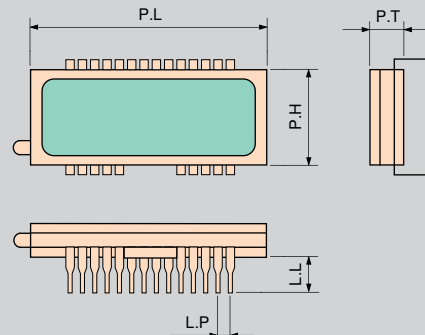
B-1



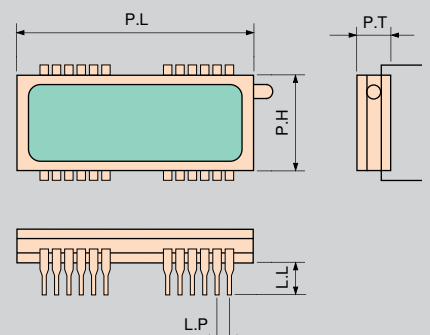
B-2



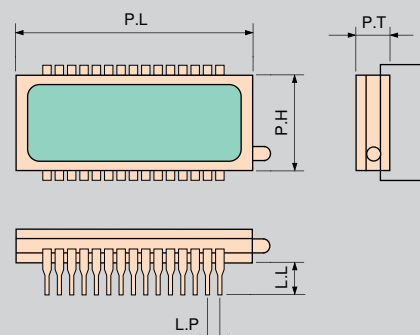
B-3



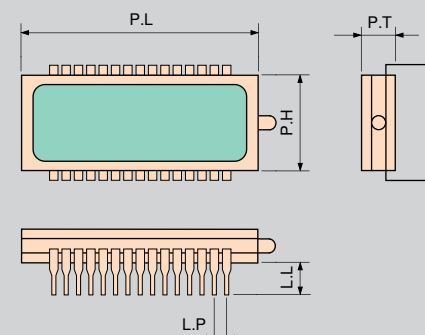
B-4



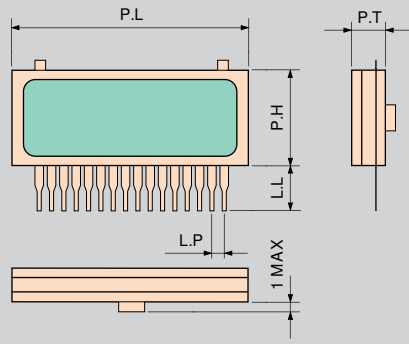
B-5



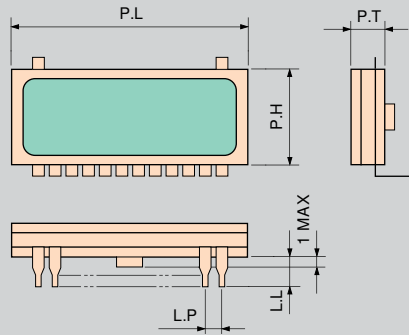
B-6



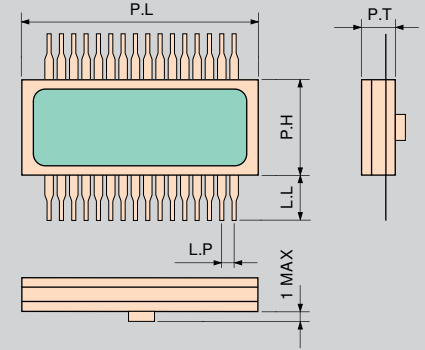
C-1



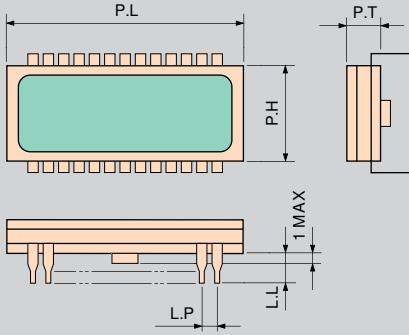
C-2



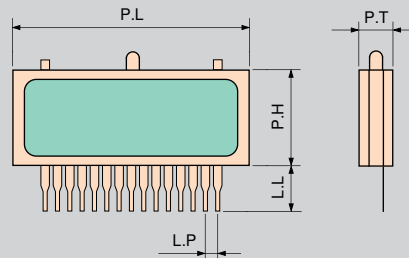
C-3



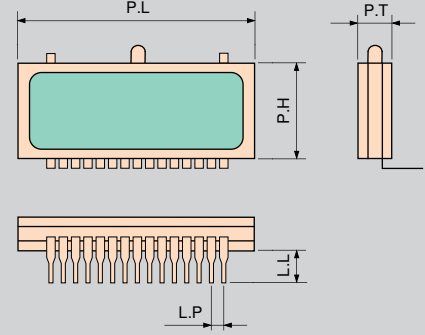
C-4



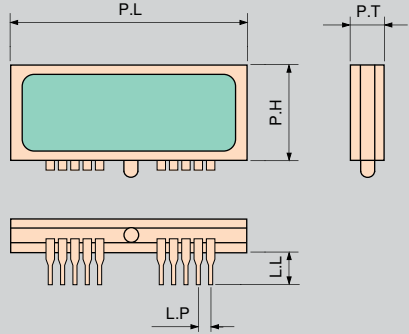
D-1



D-2



D-3



D-4

