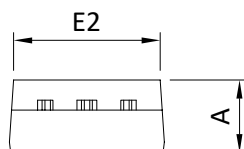
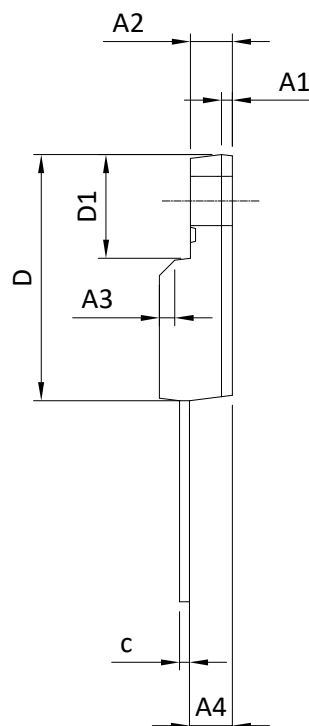
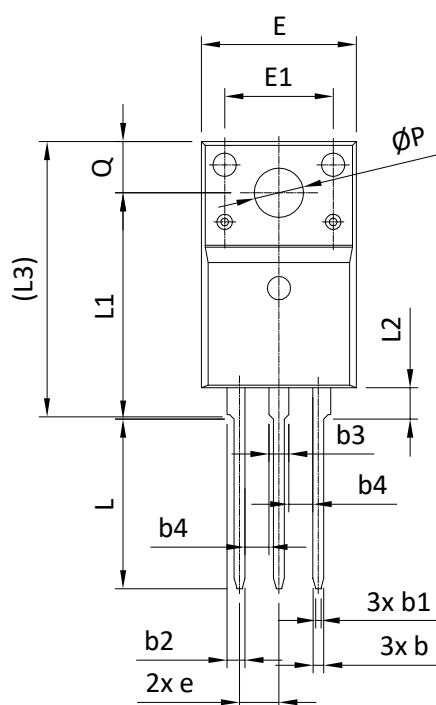
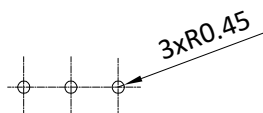




TO220F PACKAGE OUTLINE



RECOMMENDATION OF HOLE PATTERN



UNIT: mm

SYMBOLS	DIM. IN MM			DIM. IN INCH		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A	4.50	4.70	4.90	0.177	0.185	0.193
A1	---	0.70	---	----	0.028	----
A2	2.34	2.54	2.74	0.092	0.100	0.108
A3	1.00x45°			0.039x45°		
A4	2.66	2.76	2.86	0.105	0.109	0.113
b	0.59	0.69	0.79	0.023	0.027	0.031
b1	0.25	0.35	0.45	0.010	0.014	0.018
b2	1.14	1.24	1.29	0.045	0.049	0.051
b3	1.28	1.38	1.43	0.050	0.054	0.056
b4	1.40 MIN.			0.055 MIN.		
c	0.59	0.64	0.74	0.023	0.025	0.029
D	15.67	15.87	16.07	0.617	0.625	0.633
D1	6.48	6.68	6.88	0.255	0.263	0.271
e	2.54 BSC			0.100 BSC		
E	9.96	10.16	10.36	0.392	0.400	0.408
E1	---	7.00	---	----	0.276	----
E2	9.26	9.46	9.66	0.365	0.372	0.380
L	10.76	10.96	11.16	0.424	0.431	0.439
L1	14.39	14.59	14.79	0.567	0.574	0.582
L2	1.70	2.03	2.20	0.067	0.080	0.087
L3	---	17.75	17.90	----	0.699	0.705
ØP	3.08	3.18	3.28	0.121	0.125	0.129
Q	3.20	3.30	3.40	0.126	0.130	0.134

NOTES:

1. PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS. MOLD FLASH SHOULD BE LESS THAN 6 MIL.
2. TOLERANCE 0.100 MILLIMETERS UNLESS OTHERWISE SPECIFIED.
3. CONTROLLING DIMENSION IS MILLIMETER. CONVERTED INCH DIMENSIONS ARE NOT NECESSARILY EXACT.
4. DIMENSION WITH "()" IS FOR REFERENCE.