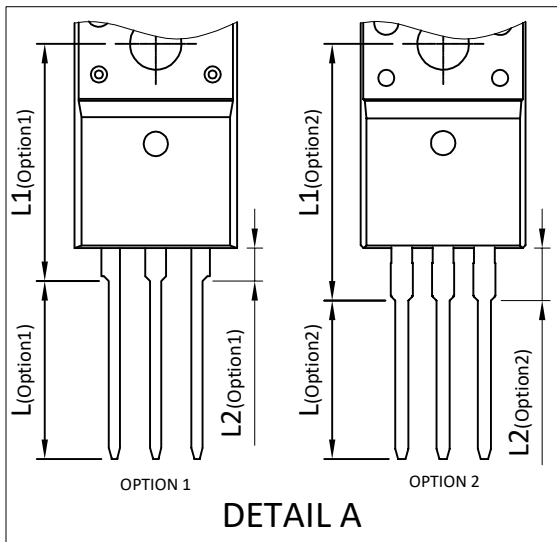
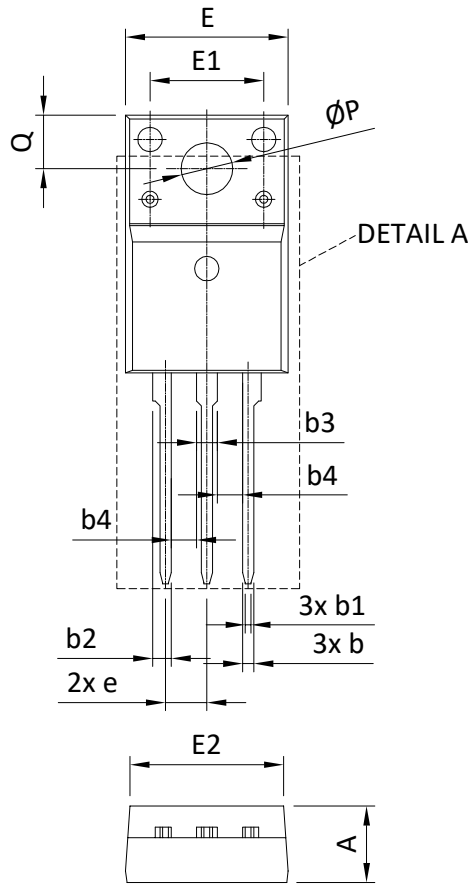
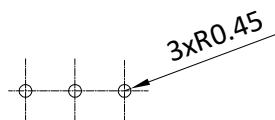




TO220F PACKAGE OUTLINE



RECOMMENDATION OF HOLE PATTERN



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	0.45	0.70	0.80	0.018	0.028	0.031
A2	2.34	2.54	2.74	0.092	0.100	0.108
A3	1.00x45°			0.039x45°		
A4	2.56	2.76	2.96	0.101	0.109	0.117
b	0.59	0.69	0.95	0.023	0.027	0.037
b1	0.25	0.35	0.45	0.010	0.014	0.018
b2	1.14	1.24	1.55	0.045	0.049	0.061
b3	1.25	1.38	1.55	0.049	0.054	0.061
b4	1.40 MIN.			0.055 MIN.		
c	0.45	0.64	0.74	0.018	0.025	0.029
D	15.57	15.87	16.17	0.613	0.625	0.637
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(Option1)	10.76	10.96	11.16	0.424	0.431	0.439
L(Option2)	---	9.75	---	----	0.384	----
L1(Option1)	14.39	14.59	14.79	0.567	0.574	0.582
L1(Option2)	---	15.80	---	----	0.622	----
L2(Option1)	1.70	2.03	2.20	0.067	0.080	0.087
L2(Option2)	3.03	3.23	3.43	0.119	0.127	0.135
phi P	3.03	3.18	3.38	0.119	0.125	0.133
Q	3.15	3.30	3.45	0.124	0.130	0.136

NOTE

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.