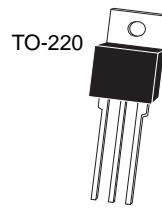
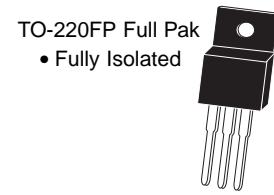


# Power Transistors

## TO-220 Case (Continued)



Standard



TO-220FP Full Pak  
• Fully Isolated

Optional

TYPE NO.		I <sub>C</sub>	P <sub>D</sub>	BV <sub>CBO</sub>	BV <sub>CEO</sub>	h <sub>FE</sub>		@ I <sub>C</sub>	V <sub>CE(SAT)</sub>	@ I <sub>C</sub>	f <sub>T</sub>
NPN	PNP	(A) MAX	(W)	(V) MIN	(V) MIN	MIN	MAX	(A)	(V) MAX	(A)	(MHz) MIN
SE9300	SE9400	10	70	60	60	1,000	--	4.0	2.0	4.0	1.0
SE9301	SE9401	10	70	80	80	1,000	--	4.0	2.0	4.0	1.0
SE9302	SE9402	10	70	100	100	1,000	--	4.0	2.0	4.0	1.0
TIP29	TIP30	1.0	30	40	40	15	75	1.0	0.7	1.0	3.0
TIP29A	TIP30A	1.0	30	60	60	15	75	1.0	0.7	1.0	3.0
TIP29B	TIP30B	1.0	30	80	80	15	75	1.0	0.7	1.0	3.0
TIP29C	TIP30C	1.0	30	100	100	15	75	1.0	0.7	1.0	3.0
TIP31	TIP32	3.0	40	40	40	10	50	3.0	1.2	3.0	3.0
TIP31A	TIP32A	3.0	40	60	60	10	50	3.0	1.2	3.0	3.0
TIP31B	TIP32B	3.0	40	80	80	10	50	3.0	1.2	3.0	3.0
TIP31C	TIP32C	3.0	40	100	100	10	50	3.0	1.2	3.0	3.0
TIP41	TIP42	6.0	65	40	40	15	75	3.0	1.5	6.0	3.0
TIP41A	TIP42A	6.0	65	60	60	15	75	3.0	1.5	6.0	3.0
TIP41B	TIP42B	6.0	65	80	80	15	75	3.0	1.5	6.0	3.0
TIP41C	TIP42C	6.0	65	100	100	15	75	3.0	1.5	6.0	3.0
TIP47		1.0	40	350	250	30	150	0.3	1.0	1.0	10
TIP48		1.0	40	400	300	30	150	0.3	1.0	1.0	10
TIP49		1.0	40	450	350	30	150	0.3	1.0	1.0	10
TIP50		1.0	40	500	400	30	150	0.3	1.0	1.0	10
TIP100	TIP105	8.0	80	60	60	1,000	20,000	3.0	2.0	3.0	4.0
TIP101	TIP106	8.0	80	80	80	1,000	20,000	3.0	2.0	3.0	4.0
TIP102	TIP107	8.0	80	100	100	1,000	20,000	3.0	2.0	3.0	4.0
TIP110	TIP115	2.0	50	60	60	500	--	2.0	2.5	2.0	25
TIP111	TIP116	2.0	50	80	80	500	--	2.0	2.5	2.0	25
TIP112	TIP117	2.0	50	100	100	500	--	2.0	2.5	2.0	25
TIP120	TIP125	5.0	65	60	60	1,000	--	3.0	2.0	3.0	4.0
TIP121	TIP126	5.0	65	80	80	1,000	--	3.0	2.0	3.0	4.0
TIP122	TIP127	5.0	65	100	100	1,000	--	3.0	2.0	3.0	4.0
TIP130	TIP135	8.0	70	60	60	1,000	15,000	4.0	2.0	4.0	--
TIP131	TIP136	8.0	70	80	80	1,000	15,000	4.0	2.0	4.0	--
TIP132	TIP137	8.0	70	100	100	1,000	15,000	4.0	2.0	4.0	--