

TO-126 Type Power Transistor Selection Guide

Part Number		I _C (A)	V _{CEO} (V)	h _{FE}		@		Max V _{CE(SAT)}		P _D (W)	f _T (MHz)	Process (NPN/PNP)
NPN	PNP			Min	Max	I _C (A)	V _{CE} (V)	(V)	@ I _C (A)			
MJE3440		0.3	250	40	160	0.02	10	0.5	0.05	15	15	36
MJE3439		0.3	350	40	160	0.02	10	0.5	0.05	15	15	36
MJE341		0.5	150	25	200	0.05	10	1	0.05	20	15	36
MJE344		0.5	200	30	300	0.05	10	1	0.05	30	15	36
2N5655		0.5	250	30	250	0.1	10	1	0.1	20	10	36
MJE340		0.5	300	30	240	0.05	10			20		36
2N5656		0.5	300	30	250	0.1	10	1	0.1	20	10	36
2N5657		0.5	350	30	250	0.1	10	1	0.1	20	10	36
2N4921	2N4918	1	40	20	100	0.5	1	0.6	1	30	3	4H/5F
2N4922	2N4919	1	60	20	100	0.5	1	0.6	1	30	3	4H/5F
2N4923	2N4920	1	80	20	100	0.5	1	0.6	1	30	3	4H/5F
MJE720	MJE710	1.5	40	40		0.15	1	0.15	0.15	20		37/77
BD345	BD344	1.5	60	40	250	0.2	1	0.4	0.2	20	50	38/78
MJE721	MJE711	1.5	60	40		0.15	1	0.15	0.15	20		38/78
BD349	BD348	1.5	80	50	250	0.25	1	0.5	0.25	20	50	39/79
MJE722	MJE712	1.5	80	40		0.15	1	0.15	0.15	20		39/79
MJE520	MJE370	3	30	25		1	1			25		4F/5F
MJE180	MJE170	3	40	50	250	0.1	1	0.3	0.5	12.5	50	37/77
MJE181	MJE171	3	60	50	250	0.1	1	0.3	0.5	12.5	50	38/78
MJE182	MJE172	3	80	50	250	0.1	1	0.3	0.5	12.5	50	39/79
MJE220	MJE230	4	40	20		2	1	0.8	2	15	50	4P/5P
MJE221	MJE231	4	40	20		1	1	0.6	1	15	50	4P/5P
MJE222	MJE232	4	40	25		1	1	0.3	0.5	15	50	4P/5P
MJE521	MJE371	4	40	40		0.1	1			40		4F/5F
2N5190	2N5193	4	40	25	100	1.5	2	0.6	1.5	40	2	4E/5E
2N6037	2N6034	4	40	750	15k	2	3	2	2	40		4J/5J
2N5191	2N5194	4	60	25	100	1.5	2	0.6	1.5	40	2	4E/5E
MJE223	MJE233	4	60	20		2	1	0.8	2	15	50	4P/5P
MJE224	MJE234	4	60	20		1	1	0.6	1	15	50	4P/5P
MJE225	MJE235	4	60	25		1	1	0.3	0.5	15	50	4P/5P
MJE800	MJE700	4	60	750		1.5	3	2.5	1.5	40		4J/5J
MJE801	MJE701	4	60	750		2	3	2.8	2	40		4J/5J
2N6038	2N6035	4	60	750	15k	2	3	2	2	40		4J/5J
MJE240	MJE250	4	80	15		2	1	0.8	2	15	40	4P/5P
MJE241	MJE251	4	80	20		1	1	0.6	1	15	40	4P/5P
MJE242	MJE252	4	80	10		1	1	0.3	0.5	15	40	4P/5P
MJE802	MJE702	4	80	750		1.5	3	2.5	1.5	40		4J/5J
MJE803	MJE703	4	80	750		2	3	2.8	2	40		4J/5J
2N5192	2N5195	4	80	20	80	1.5	2	0.6	1.5	40	2	4E/5E
2N6039	2N6036	4	80	750	15k	2	3	2	2	40		4J/5J
MJE243	MJE253	4	100	20		1	1	0.6	1	15	40	4P/5P
MJE244	MJE254	4	100	10		1	1	0.3	0.5	15	40	4P/5P
MJE200	MJE210	5	25	45	180	2	1	0.75	2	15	65	4R/5R

Pinout: ECB



MEDIUM POWER (Continued)

Type No.	Case Style	VCBO (V) Min	VCER* VCEO (V) Min	VEBO (V) Min	ICES* ICBO (nA) @ VCB (V) Max	hFE @ IC & VCE			VCE(SAT) (V) & VBE(SAT) (V) @ IC (mA)			Cob (pF) Max	fT (MHz) @ IC (mA)		toff (ns) Max	NF (dB) Max	Test Conditions	Process No.
						Min	Max	@ IC (mA)	Max	Min	Max		@ IC (mA)	Min				
SE7056	TO-39	300	300	7	100 200	20	1	20	1.0	0.85	20	3.5	50	15				48
						40	10	20										
						40	30	20										
SV7056	TO-202 (55)	300	300	7	100 200	20	1	20	1.0	0.85	20		50	15				48
						40	10	20										
						40	30	20										
TN3742	TO-237 (91)	300	300	7	200 200	10	3	10	0.75	1.0	10	6	30	10				48
						15	10	10										
						20	200	30	10	1.0	1.2	30						
						20	50	20										



POWER

Type No.	Case Style	VCBO (V) Min	VCEO (V) Min	VEBO (V) Min	ICEX* ICES* ICBO (μA) @ VCB (V) Max	hFE @ IC & VCE			VCE(SAT) (V) & VBE(SAT) (V) @ IC (A)			Cob (pF) Max	fT (MHz) @ IC (A)		Process No.					
						Min	Max	@ IC (A)	Max	Min	Max		@ IC (A)	Min		Max				
2N5655	TO-126		250		10 275	25		0.05 10	1.0		0.1							36		
						30	250	0.1 10											2.5	0.25
						15		0.25 10											10.0	0.5
						5		0.5 10												
2N5656	TO-126		300		10 350	25		0.05 10	1.0		0.1	25	10		0.05			36		
						30	250	0.1 10											2.5	0.25
						15		0.25 10											10.0	0.5
						5		0.5 10												
2N5657	TO-126		350		10 375	25		0.05 10	1.0		0.1	25	10		0.05			36		
						30	250	0.1 10											2.5	0.25
						15		0.25 10											10.0	0.5
						5		0.5 10												
MJE340	TO-126		300		100 300	30	240	0.05 10										36		
MJE341	TO-126		150		300 175	20		0.01 10	1.0		0.05	15	15		0.05			36		
						25	200	0.05 10												
						20		0.15 10												
MJE344	TO-126		200		100 200	30	300	0.05 10	1.0		0.05	15	15		0.05		36			

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NPN Transistors