

Industry P/N	Polarity	Package	Direct Replacement	Closest Equivalent Replacement	Process Package	Package Type	Industry P/N	Polarity	Package	Direct Replacement	Closest Equivalent Replacement	Process Package	Package Type
2N5020	P	TO-18	2N5020		8811	TO-18	2N5688	N	TO-92	2N5688		5072	TO-92
2N5021	P	TO-18	2N5021		8971	TO-92	2N5669	N	TO-92	2N5669		5072	TO-92
2N5033	P	TO-106	PN5033-18		8971	TO-92	2N5670	N	TO-92	2N5670		5072	TO-92
2N5045	N	TO-71	2N5045		8312	TO-71	2N5717	N	TO-92		PN3686	5272	TO-92
2N5046	N	TO-71	2N5046		8312	TO-71	2N5718	N	TO-92		PN4302	5272	TO-92
2N5047	N	TO-71	2N5047		8312	TO-71	2N5801	N	TO-92		J210	9072	TO-92
2N5078	N	TO-72	2N5078		5025	TO-72	2N5802	N	TO-92		J212	9072	TO-92
2N5103	N	TO-72	2N5103		5025	TO-72	2N5902	N	TO-78	2N5902		8424	TO-78
2N5104	N	TO-72	2N5104		5025	TO-72	2N5903	N	TO-78	2N5903		8424	TO-78
2N5105	N	TO-72	2N5105		5025	TO-72	2N5904	N	TO-78	2N5904		8424	TO-78
2N5114	P	TO-18	2N5114		8811	TO-18	2N5905	N	TO-78	2N5905		8424	TO-78
2N5115	P	TO-18	2N5115		8811	TO-18	2N5906	N	TO-78	2N5906		8424	TO-78
2N5116	P	TO-18	2N5116		8811	TO-18	2N5907	N	TO-78	2N5907		8424	TO-78
2N5158	N	TO-18		2N5433	8807	TO-52	2N5908	N	TO-78	2N5908		8424	TO-78
2N5159	N	TO-18		2N5432	5807	TO-52	2N5909	N	TO-78	2N5908		8424	TO-78
2N5163	N	TO-106	PN5163-18		5072	TO-18	2N5911	N	TO-78	2N5911		9324	TO-78
2N5196	N	TO-71	2N5196		8312	TO-18	2N5912	N	TO-78	2N5912		9324	TO-78
2N5197	N	TO-71	2N5197		8312	TO-18	2N5949-18	N	TO-106	2N5949-18		5077	TO-92
2N5198	N	TO-71	2N5198		8312	TO-18	2N5950	N	TO-106	2N5950-18		5077	TO-92
2N5199	N	TO-71	2N5199		8312	TO-18	2N5951	N	TO-106	2N5951-18		5077	TO-92
2N5245	N	TO-106	2N5245-18		9077	TO-92	2N5952	N	TO-106	2N5952-18		5077	TO-92
2N5246	N	TO-106	2N5246-18		9077	TO-92	2N5953	N	TO-106	2N5953-18		5077	TO-92
2N5247	N	TO-106	2N5247-18		9077	TO-92	2N6483	N	TO-71	2N6483		9512	TO-71
2N5248	N	TO-92	2N5248		5074	TO-92	2N6484	N	TO-71	2N6484		9512	TO-71
2N5358	N	TO-72	2N5358		5525	TO-72	2N6485	N	TO-71	2N6485		9512	TO-71
2N5359	N	TO-72	2N5359		5525	TO-72	2SK11	N	TO-72		2N3459	5202	TO-18
2N5360	N	TO-72	2N5360		5525	TO-72	2SK12	N	TO-72		2N4340	5202	TO-18
2N5361	N	TO-72	2N5361		5525	TO-72	2SK13	N	TO-72		2N4340	5202	TO-18
2N5362	N	TO-72	2N5362		5525	TO-72	2SK15	N	TO-72		2N4340	5202	TO-18
2N5363	N	TO-72	2N5363		5525	TO-72	2SK19	N	TO-106		2N5485-18	5072	TO-92
2N5364	N	TO-72	2N5364		5525	TO-72	2SK30	N	TO-92		PN4304	5272	TO-92
2N5397	N	TO-72	2N5397		9025	TO-72	2SK37	N	B-69		2N5484	5072	TO-92
2N5398	N	TO-72	2N5398		9025	TO-72	2SK48	N	TO-72		2N3686	5225	TO-72
2N5432	N	TO-18	2N5432		5807	TO-72	2SK68	N	TO-92		PF5101	5172	TO-92
2N5433	N	TO-18	2N5433		5807	TO-72	3SK22	N	TO-72		2N5078	5025	TO-72
2N5434	N	TO-18	2N5434		5807	TO-72	3SK23	N	TO-72		2N5397	9025	TO-72
2N5452	N	TO-71	2N5452		8312	TO-71	3SK28	N	TO-72		2N5078	5025	TO-72
2N5453	N	TO-71	2N5453		8312	TO-71	A5T3821	N	TO-92	2N3821		5525	TO-72
2N5454	N	TO-71	2N5454		8312	TO-71	A5T3822	N	TO-92	2N3822		5525	TO-72
2N5457	N	TO-92	2N5457		5572	TO-92	A5T3823	N	TO-92	2N3823		5029	TO-72
2N5458	N	TO-92	2N5458		5572	TO-92	A5T3824	N	TO-92	2N3824		5525	TO-72
2N5459	N	TO-92	2N5459		5572	TO-92	A5T5460	P	TO-92	2N5460		8971	TO-92
2N5460	P	TO-92	2N5460		8971	TO-92	A5T5461	P	TO-92	2N5461		8971	TO-92
2N5461	P	TO-92	2N5461		8971	TO-92	A5T5462	P	TO-92	2N5462		8971	TO-92
2N5462	P	TO-92	2N5462		8971	TO-92	BC264A	N	TO-92	BC264A		5077	TO-92
2N5471	P	TO-72		2N5020	8911	TO-18	BC264B	N	TO-92	BC264B		5077	TO-92
2N5472	P	TO-72		2N5020	8911	TO-18	BC264C	N	TO-92	BC264C		5077	TO-92
2N5473	P	TO-72		2N5020	8911	TO-18	BC264D	N	TO-92	BC264D		5077	TO-92
2N5474	P	TO-72		2N5020	8911	TO-18	BF244A	N	TO-92	BF244A		5074	TO-92
2N5475	P	TO-72		2N5020	8911	TO-18	BF244B	N	TO-92	BF244B		5074	TO-92
2N5476	P	TO-72		2N5020	8911	TO-18	BF244C	N	TO-92	BF244C		5074	TO-92
2N5484	N	TO-92	2N5484		5072	TO-92	BF245A	N	TO-92	BF245A		5077	TO-92
2N5485	N	TO-92	2N5485		5072	TO-92	BF245B	N	TO-92	BF245B		5077	TO-92
2N5486	N	TO-92	2N5486		5072	TO-92	BF245C	N	TO-92	BF245C		5077	TO-92
2N5515	N	TO-71	2N5515		9512	TO-71	BF246A	N	TO-92	BF246A		5174	TO-92
2N5516	N	TO-71	2N5516		9512	TO-71	BF246B	N	TO-92	BF246B		5174	TO-92
2N5517	N	TO-71	2N5517		9512	TO-71	BF246C	N	TO-92	BF246C		5174	TO-92
2N5518	N	TO-71	2N5518		9512	TO-71	BF247A	N	TO-92	BF247A		5177	TO-92
2N5519	N	TO-71	2N5519		9512	TO-71	BF247B	N	TO-92	BF247B		5177	TO-92
2N5520	N	TO-71	2N5520		9512	TO-71	BF247C	N	TO-92	BF247C		5177	TO-92
2N5521	N	TO-71	2N5521		9512	TO-71	BF256A	N	TO-92	BF256A		5077	TO-92
2N5522	N	TO-71	2N5522		9512	TO-71	BF256B	N	TO-92	BF256B		5077	TO-92
2N5523	N	TO-71	2N5523		9512	TO-71	BF256C	N	TO-92	BF256C		5077	TO-92
2N5524	N	TO-71	2N5524		9512	TO-71	BFW10	N	TO-72		2N4224	5025	TO-72
2N5545	N	TO-71	2N5545		8312	TO-71	BFW11	N	TO-72		2N5558	5025	TO-72
2N5546	N	TO-71	2N5546		8312	TO-71	BFW61	N	TO-72		2N4224	5025	TO-72
2N5547	N	TO-71	2N5547		8312	TO-71	BSV78	N	TO-18		2N4856	5102	TO-18
2N5549	N	TO-72		2N5397	9025	TO-72	BSV79	N	TO-18		2N4857	5102	TO-18
2N5555	N	TO-92	2N5555		5072	TO-92	BSV80	N	TO-18		2N4858	5102	TO-18
2N5556	N	TO-72	2N5556		5025	TO-72	E101	N	TO-106	J201-18		5272	TO-92
2N5557	N	TO-72	2N5557		5025	TO-72	E102	N	TO-106	J202-18		5272	TO-92
2N5558	N	TO-72	2N5558		5025	TO-72	E103	N	TO-106	J203-18		5272	TO-92
2N5561	N	TO-71	2N5561		9812	TO-71	E106	N	TO-106		J108-18	5872	TO-92
2N5562	N	TO-71	2N5562		9812	TO-71	E107	N	TO-106		J108-18	5872	TO-92
2N5563	N	TO-71	2N5563		9812	TO-71	E108	N	TO-106	J108-18		5872	TO-92
2N5564	N	TO-71	2N5564		9812	TO-71	E109	N	TO-106	J109-18		5872	TO-92
2N5565	N	TO-71	2N5565		9812	TO-71	E110	N	TO-106	J110-18		5872	TO-92
2N5566	N	TO-71	2N5566		9812	TO-71	E111	N	TO-106	J111-18		5172	TO-92
2N5592	N	TO-72		PN5163-18	5072	TO-92	E112	N	TO-106	J112-18		5172	TO-92
2N5593	N	TO-72		PN5163-18	5072	TO-92	E113	N	TO-106	J113-18		5172	TO-92
2N5594	N	TO-72		PN5163-18	5072	TO-92	E114	N	TO-106	J114-18		9072	TO-92
2N5638	N	TO-92	2N5638		5172	TO-92	E174	N	TO-106	J174-18		8874	TO-92
2N5639	N	TO-92	2N5639		5172	TO-92	E175	N	TO-106	J175-18		8874	TO-92
2N5640	N	TO-92	2N5640		5172	TO-92	E176	N	TO-106	J176-18		8874	TO-92
2N5653	N	TO-92	2N5653		5172	TO-92	E177	N	TO-106	J177-18		8874	TO-92
2N5654	N	TO-92	2N5654		5172	TO-92	E201	N	TO-106	J201-18		5272	TO-92



GENERAL PURPOSE AMPS

N-Channel JFETs

Type No.	Case Style	BV _{GSS} •BV _{GDO} (V) @ I _G		I _{GSS} (nA)@V _{DG}		V _p (V) @ V _{DS} I _D			I _{DSS} (mA) @ V _{DS}			G _{fs} (mmho) @ V _{DS}			G _{oss} (μmho)@V _{DS}			C _{iss} (pF)@V _{DS} V _{GS}			C _{rss} (pF)@V _{DS} V _{GS}			e _n ($\frac{NV}{\sqrt{Hz}}$)@Freq Max (Hz)	Process No.	Pkg. No.	
		Min	(μA)	Max	(V)	Min	Max	(V)	(nA)	Min	Max	(V)	Min	Max	(V)	Max	(V)	Max	(V)	(V)	Max	(V)	(V)				
2N3369	TO-18	40	1	5	30	6.5	20	1000	0.5	2.5	30	0.6	2.5	30	30	30	20	8	0	3	30	0			52	02	
2N3370	TO-18	40	1	5	30	3.2	20	1000	0.1	0.6	30	0.3	2.5	30	15	30	20	8	0	3	30	0			52	02	
2N3458	TO-18	50	1	0.25	30	7.8	20	1000	3	15	20	2.5	10	20	35	30	18	0	-10	5	30	0	225	20	52	02	
2N3459	TO-18	50	1	0.25	30	3.4	20	1000	0.8	4	20	1.5	6	20	20	30	18	0	-6	5	30	0	155	20	52	02	
2N3460	TO-18	50	1	0.25	30	1.8	20	1000	0.2	1	20	0.8	4.5	20	5	30	18	0	-4	5	30	0	155	20	52	02	
2N3684	TO-72	50	1	0.1	30	2	5	20	1	2.5	7.5	20	2	3	20	50	20	4	20	0	1.2	20	0	150	100	52	25
2N3685	TO-72	50	1	0.1	30	1	3.5	20	1	1	3	20	1.5	2.5	20	25	20	4	20	0	1.2	20	0	150	100	52	25
2N3686	TO-72	50	1	0.1	30	0.6	2	20	1	0.4	1.2	20	1	2	20	10	20	4	20	0	1.2	20	0	150	100	52	25
2N3687	TO-72	50	1	0.1	30	0.3	1.2	20	1	0.1	0.5	20	0.5	1.5	20	5	20	4	20	0	1.2	20	0	150	100	52	25
2N3821	TO-72	50	1	0.1	30	4	15	0.5	0.5	2.5	15	1.5	4.5	15	10	15	6	15	0	3	15	0	200	10	55	25	
2N3822	TO-72	50	1	0.1	30	6	15	0.5	2	10	15	3	6.5	15	20	15	6	15	0	3	15	0	200	10	55	25	
2N3967	TO-72	30	1	0.1	20	2	5	20	1	2.5	10	20	2.5		20	35	20*	5	20	*	1.3	20	■	84	100	55	25
2N3967A	TO-72	30	1	0.1	20	2	5	20	1	2.5	10	20	2.5		20	35	20*	5	20	*	1.3	20	■	160	10	55	25
2N3968	TO-72	30	1	0.1	20	3	20	1	1	5	20	2		20	15	20**	5	20	**	1.3	20	†	84	100	55	25	
2N3968A	TO-72	30	1	0.1	20	3	20	1	1	5	20	2		20	15	20**	5	20	**	1.3	20	†	160	10	55	25	
2N3969	TO-72	30	1	0.1	20	1.7	20	1	0.4	2	20	1.3		20	5	20††	5	20	††	1.3	20	*	84	100	55	25	
2N3969A	TO-72	30	1	0.1	20	1.7	20	1	0.4	2	20	1.3		20	5	20††	5	20	††	1.3	20	*	160	10	55	25	
2N4220	TO-72	30	10	0.1	15	4	15	0.1	0.5	3	15	1	4	15	10	15	6	15	0	2	15	0			55	25	
2N4220A	TO-72	30	10	0.1	15	4	15	0.1	0.5	3	15	1	4	15	10	15	6	15	0	2	15	0	115	100	55	25	
2N4221	TO-72	30	10	0.1	15	6	15	0.1	2	6	15	2	5	15	20	15	6	15	0	2	15	0			55	25	
2N4221A	TO-72	30	10	0.1	15	6	15	0.1	2	6	15	2	5	15	20	15	6	15	0	2	15	0	115	100	55	25	
2N4222	TO-72	30	10	0.1	15	8	15	0.1	5	15	15	2.5	6	15	40	15	6	15	0	2	15	0			55	25	
2N4222A	TO-72	30	10	0.1	15	8	15	0.1	5	15	15	2.5	6	15	40	15	6	15	0	2	15	0	115	100	55	25	
2N4338	TO-18	50	1	0.1	30	0.3	1	15	100	0.2	0.6	15	0.6	1.8	15	5	15	7	15	0	3	15	0	68	1000	52	02
2N4339	TO-18	50	1	0.1	30	0.6	1.8	15	100	0.5	1.5	15	0.8	2.4	15	15	15	7	15	0	3	15	0	68	1000	52	02
2N4340	TO-18	50	1	0.1	30	1	3	15	100	1.2	3.6	15	1.3	3	15	30	15	7	15	0	3	15	0	68	1000	52	02
2N4341	TO-18	50	1	0.1	30	2	6	15	100	3	9	15	2	4	15	60	15	7	15	0	3	15	0	68	1000	55	02
2N5103	TO-72	25	10	0.1	15	0.5	4	15	1	1	8	15	2	8	15	100	15	5	15	0	1	15	0	100	10	50	25
2N5104	TO-72	25	1	0.1	15	0.5	4	15	1	2	6	15	3.5	7.5	15	100	15	5	15	0	1	15	0	50	10	50	25

■ I_D = 1 mA; † I_D = 500 μA; †† I_D = 40 μA; ** I_D = 100 μA; * I_D = 250 μA.

t = typical value.