

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	2N5668	N	TO-92	2N5668		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	2N5909		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	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		9612	TO-71	E109	N	TO-106	J109-18		5872	TO-92
2N5565	N	TO-71	2N5565		9612	TO-71	E110	N	TO-106	J110-18		5872	TO-92
2N5566	N	TO-71	2N5566		9612	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 DUAL JFETs (Continued)

Type No.	Case Style	Operating Conditions For These Characteristics										V_p (V)		I_{DSS} (mA)		G_{fs} (mmhos)		G_{oss} (μ mhos)		I_{GSS} (μ A) @ V_{DG} (V)		C_{iss} (pF)		C_{rss} (pF)		BV (V)		e_n (nV/√Hz) @ f (Hz)		I_{DSS} Match %	G_{fs} Match %	G_{oss1-2} (μ mhos)	$I_{G1-I_{G2}}$ 125°C (nA)	Process No.	Pkg. No.				
		Op. Char. V_{DG} (V)	I_D (μ A)	V_{GS1-2} V_{OS} (mV) Max	Drift (μ V/°C) ΔV_{GS} Max	I_G (pA) Max	G_{fs} (μ mhos) Min Max	G_{oss} (μ mhos) Max	CMRR (dB) Min	V_{gs} (V) Min Max	Min																									Max	Min	Max	Min
J411	Mini-	20	200	25	25	250	600	1200	5	0.3	4	0.5	3.5	0.5	6	1	4	20	250	20	4.5	1.2	40	50	100							83	60						
J412	DIP	20	200	40	80	250	600	1200	5	0.3	4	0.5	3.5	0.5	6	1	4	20	250	20	4.5	1.2	40	50	100						83	60							
NPD8301	8-Pin	20	200	5	10	100	700	1200	5	70	0.3	4	0.5	3.5	0.5	6	1	4	20	100	20	4.5	1.2	40	50	100						83	67						
NPD8302	Mini-	20	200	10	15	100	700	1200	5	0.3	4	0.5	3.5	0.5	6	1	4	20	100	20	4.5	1.2	40	50	100						83	67							
NPD8303	DIP	20	200	15	25	100	700	1200	5	0.3	4	0.5	3.5	0.5	6	1	4	20	100	20	4.5	1.2	40	50	100						83	67							
U231	TO-71	20	200	5	10	50	600	1000	10	0.3	4	See 2N3954 as an improved replacement																						83	12				
U232	TO-71	20	200	10	25	50	600	1000	10	0.3	4	See 2N3955 as an improved replacement																							83	12			
U233	TO-71	20	200	15	50	50	600	1000	10	0.3	4	See 2N3956 as an improved replacement																								83	12		
U234	TO-71	20	200	20	75	50	600	1000	10	0.3	4	See 2N3957 as an improved replacement																									83	12	
U235	TO-71	20	200	25	100	50	600	1000	10	0.3	4	See 2N3958 as an improved replacement																										83	12
U401	TO-71	10	200	5	10	15	1000	1600	2	95	2.3	0.5	2.5	0.5	10	2	7	20	25	30	8	3	50	20	10									98	12				
U402	TO-71	10	200	10	10	15	1000	1600	2	95	2.3	0.5	2.5	0.5	10	2	7	20	25	30	8	3	50	20	10										98	12			
U403	TO-71	10	200	10	25	15	1000	1600	2	95	2.3	0.5	2.5	0.5	10	2	7	20	25	30	8	3	50	20	10										98	12			
U404	TO-71	10	200	15	25	15	1000	1600	2	95	2.3	0.5	2.5	0.5	10	2	7	20	25	30	8	3	50	20	10										98	12			
U405	TO-71	10	200	20	40	15	1000	1600	2	90	2.3	0.5	2.5	0.5	10	2	7	20	25	30	8	3	50	20	10										98	12			
U406	TO-71	10	200	40	80	15	1000	1600	2	2.3	0.5	2.5	0.5	10	2	7	20	25	30	8	3	50	20	10											98	12			

† $I_D = 100 \mu A$ for V_{GS} for 2N5561/2/3 only.



LOW FREQUENCY—LOW NOISE DUAL JFETs

Type No.	Case Style	Operating Conditions For These Characteristics										V_p (V)		I_{DSS} (mA)		G_{fs} (mmhos)		G_{oss} (μ mhos)		I_{GSS} (μ A) @ V_{DG} (V)		C_{iss} (pF)		C_{rss} (pF)		BV (V)		e_n (nV/√Hz) @ f (Hz)		I_{DSS} Match %	G_{fs} Match %	G_{oss1-2} (μ mhos)	$I_{G1-I_{G2}}$ 125°C (nA)	Process No.	Pkg. No.
		Op. Char. V_{DG} (V)	I_D (μ A)	V_{GS1-2} V_{OS} (mV) Max	Drift (μ V/°C) ΔV_{GS} Max	I_G (pA) Max	G_{fs} (μ mhos) Min Max	G_{oss} (μ mhos) Max	CMRR (dB) Min	V_{gs} (V) Min Max	Min																								
2N5515	TO-71	20	200	5	5	100	500	1000	1	100	0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	30	10	5	3	0.1	10			95	12	
2N5516	TO-71	20	200	5	10	100	500	1000	1	100	0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	30	10	5	3	0.1	10			95	12	
2N5517	TO-71	20	200	10	20	100	500	1000	1	90	0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	30	10	5	5	0.1	10			95	12	
2N5518	TO-71	20	200	15	40	100	500	1000	1		0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	30	10	5	5	0.1	10			95	12	
2N5519	TO-71	20	200	15	80	100	500	1000	1		0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	30	10	10	10	0.1	10			95	12	
2N5520	TO-71	20	200	5	5	100	500	1000	1	100	0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	15	10	5	3	0.1	10			95	12	
2N5521	TO-71	20	200	5	10	100	500	1000	1	100	0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	15	10	5	3	0.1	10			95	12	
2N5522	TO-71	20	200	10	20	100	500	1000	1	90	0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	15	10	5	5	0.1	10			95	12	
2N5523	TO-71	20	200	15	40	100	500	1000	1		0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	15	10	5	5	0.1	10			95	12	
2N5524	TO-71	20	200	15	80	100	500	1000	1		0.2	3.8	0.7	4	0.5	7.5	1	4	10	250	30	25	5.0	40	15	10	10	10	0.1	10			95	12	
2N6483	TO-71	20	200	5	5	100	500	1500	1	100	0.2	3.8	0.7	4	0.5	7.5	1	4	10	200	30	20	3.5	50	10	10	5	3	0.1	10			95	12	
2N6484	TO-71	20	200	10	10	100	500	1500	1	100	0.2	3.8	0.7	4	0.5	7.5	1	4	10	200	30	20	3.5	50	10	10	5	3	0.1	10			95	12	
2N6485	TO-71	20	200	15	25	100	500	1500	1	90	0.2	3.8	0.7	4	0.5	7.5	1	4	10	200	30	20	3.5	50	10	10	5	5	0.1	10			95	12	

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