

Part Number	V _{(BR)DSS} Min (V)	r _{DS(on)} Max (Ω)	V _{GS(th)} Max (V)	t _{ON} Max (ns)	C _{iss} Typ (pF)	I _D Max (A)	PD Max (W)
TO-226AA (TO-92)							
VP0808L	-80	5	-4.5	55	75	-3	0.8
VP1008L	-100	5	-4.5	55	75	-3	0.8
TP1220L	-120	20	-2.4	25	30	-0.48	0.8
BSS92	-200	20	-2.8	14	30	-0.6	1.0
VP2020L	-200	20	-2.5	25	30	-0.48	0.8
TP2020L	-200	20	-2.4	25	30	-0.48	0.8
VP2410L	-240	10	-2.5	45	65	-0.72	0.8
TO-206AF (TO-72)							
3N164	-30	300	-5	36	2.4	-0.05	0.375
3N163	-40	250	-5	36	2.4	-0.05	0.375

DMOS FETs—N- and P-Channel Quads

Part Number	V _{(BR)DSS} Min (V)	r _{DS(on)} Max (Ω)	V _{GS(th)} Max (V)	t _{ON} Max (ns)	C _{iss} Typ (pF)	I _D Max (A)	PD Max (W)
14-Pin Ceramic (P) and Plastic (J)							
VQ3001J	±30	1/2	2.5/-4.5	30	38/60	±3	2.00
VQ3001P		1/2	2.5/-4.5	30	38/60	±3	2.00

DMOS FETs—N-Channel Depletion-Mode MOS

Part Number	V _{(BR)DSS} Min (V)	r _{DS(on)} Max (Ω)	V _{GS(th)} Max (V)	t _{ON} Max (ns)	C _{iss} Typ (pF)	I _D Max (A)	PD Max (W)
TO-226AA (TO-92)							
ND2012L	200	12	-4.0	40	35	0.8	0.80
ND2020L		20	-2.5	40	35	0.8	0.80
BSS129	230	20	-3	90	70	0.6	1.00
ND2406L	240	6	-4.5	90	70	0.9	0.80
ND2410L		10	-2.5	90	70	0.9	0.80

JFETs—N-Channel JFET Amplifiers

Part Number	Bkdown Voltage Min (V)	I _{DSS} (mA)		g _{fs} (mS)		V _{GS(off)} (V)		Gate Leakage (pA)		r _{DS(on)} (Ω)		C _{iss} (pF)		Comments
		Min	Max	Min	Max	Min	Max	Typ	Max	Typ	Max	Typ	Max	
TO-220AA (TO-92)														
J204	-25	0.2	3	0.5		-0.3	-2	-2	-100	450		4.5		Low Noise/Voltage
2N3819		2	20	2	6.5		-8	-2	-2,000	150			8	High Frequency
2N5484		1	5	3	6	-0.3	-3	-2	-1,000	300			5	High Freq./Gen. Pur.
2N5485		4	10	3.5	7	-0.5	-4	-2	-1,000	175			5	High Freq./Gen. Pur.
2N5486		8	20	4	8	-2	-6	-2	-1,000	110			5	High Freq./Gen. Pur.
J210		2	15	4	12	-1	-3	-1	-100	140			4	High Frequency
J211		7	20	6	12	-2.5	-4.5	-1	-100	100			4	High Frequency
J212		15	40	7	12	-4	-6	-1	-100	70			4	High Frequency
J308		12	60	8		-1	-6.5	-2	-1,000	35			5	Very High Frequency
J309		12	30	10		-1	-4	-2	-1,000	45			5	Very High Frequency
J310	24	60	8		-2	-6.5	-2	-1,000	35			5	Very High Frequency	
J305	-30	1	8	3		-0.5	-3	-2	-100	200		2.2		High Frequency
J304		5	15	4.5	7.5	-2	-6	-2	-100	150		2.2		High Frequency

Part Number	Bkdown Voltage Min (V)	I _{DSS} (mA)		g _{fs} (mS)		V _{GS(off)} (V)		Gate Leakage (pA)		r _{DS(on)} (Ω)		C _{iss} (pF)		Comments
		Min	Max	Min	Max	Min	Max	Typ	Max	Typ	Max	Typ	Max	
TO-220AA (TO-92)														
PN4117A	-40	0.03	0.09	0.07	0.21	-0.6	-1.8	-0.2	-1	11,000			3	Ultralow Leakage
PN4118A		0.08	0.24	0.08	0.25	-1	-3	-0.2	-1	7,000			3	Ultralow Leakage
PN4119A		0.2	0.6	0.1	0.33	-2	-6	-0.2	-1	4,500			3	Ultralow Leakage
J201		0.2	1	0.5		-0.3	-1.5	-2	-100	750			4.5	Low Noise/Voltage
J202		0.9	4.5	1		-0.8	-4	-2	-100	400			4.5	Low Noise
TO-236 (SOT-23)														
SST204	-25	0.2	3	0.5		-0.3	-2	-2	-100	450			2.2	Low Noise/Voltage
SST5484		1	5	3	6	-0.3	-3	-2	-1,000	300			5	High Freq/Gen Pur.
SST5485		4	10	3.5	7	-0.5	-4	-2	-1,000	175			5	High Freq/Gen Pur.
SST5486		8	20	4	8	-2	-6	-2	-1,000	110			5	High Freq/Gen Pur.
SST308		12	60	8		-1	-6.5	-2	-1,000	35			5	Very High Frequency
SST309		12	30	8		-1	-4	-2	-1,000	45			5	Very High Frequency
SST310		24	60	8		-2	-6.5	-2	-1,000	35			5	Very High Frequency
SST4416	-30	5	15	4.5	7.5		-6	-2	-1,000	150			4	Low Noise/High Freq.
SST4117	-40	0.03	0.09	0.07	0.21	-0.6	-1.8	-0.2	-10	11,000			3	Very Low Leakage
SST4118		0.08	0.24	0.08	0.25	-1	-3	-0.2	-10	7,000			3	Very Low Leakage
SST4119		0.2	0.6	0.1	0.33	-2	-6	-0.2	-10	4,500			3	Very Low Leakage
SST201		0.2	1	0.5		-0.3	-1.5	-2	-100	750			4.5	Low Noise/Voltage
SST202		0.9	4.5	1		-0.8	-4	-2	-100	400			4.5	Low Noise
TO-206AA (TO-18), TO-206AC (TO-52), TO-206AF (TO-72)														
U309	-25	12	30	10		-1	-4	-2	-150	45			5	Very High Frequency
U310		24	60	10		-2.5	-6	-2	-150	35			5	Very High Frequency
2N4416	-30	5	15	4.5	7.5		-6	-2	-100	150			4	Low Noise/High Freq.
2N4416A	-35	5	15	4.5	7.5	-2.5	-6	-2	-100	150			4	Low Noise/High Freq.
2N4117A	-40	0.03	0.09	0.07	0.21	-0.6	-1.8	-0.2	-1	11,000			3	Ultralow Leakage
2N4118A		0.08	0.24	0.08	0.25	-1	-3	-0.2	-1	7,000			3	Ultralow Leakage
2N4119A		0.2	0.6	0.1	0.33	-2	-6	-0.2	-1	4,500			3	Ultralow Leakage
2N4338	-50	0.2	0.6	0.6	1.8	-0.3	-1	-2	-100		2,500		7	Low Noise/Voltage
2N4339		0.5	1.5	0.8	2.4	-0.6	-1.8	-2	-100		1,700		7	Low Noise/Voltage
2N4340		1.2	3.6	1.3	3	-1	-3	-2	-100		1,500		7	Low Noise
2N4341		3	9	2	4	-2	-6	-2	-100		800		7	Low Noise

JFETs—N-Channel JFET Analog Switches

Part Number	Bkdown Voltage Min (V)	r _{DS(on)} Max (Ω)	V _{GS(off)} (V)		I _{DSS} (mA)		Gate Leakage (pA)		g _{fs} Typ (mS)			C _{iss} Max (pF)	
			Min	Max	Min	Max	Typ	Max	I _D = 1 mA	I _D = 10 mA	I _D = 25 mA		
TO-226AA (TO-92)													
J105	-25	3	-4.5	-10	500		-20	-3,000				55	160
J106		6	-2	-6	200		-20	-3,000				55	160
J107		8	-0.5	-4.5	100		-20	-3,000				55	160
J108		8	-3	-10	80		-10	-3,000			17		85
J109		12	-2	-6	40		-10	-3,000			17		85
J110		18	-0.5	-4	10		-10	-3,000			17		85
J111	-35	30	-3	-10	20		-5	-1,000	6				12
J112		50	-1	-5	5		-5	-1,000	6				12
J113		100		-3	2		-5	-1,000	6				12

Part Number	Bkdown Voltage Min (V)	$r_{DS(on)}$ Max (Ω)	$V_{GS(off)}$ (V)		I_{DSS} (mA)		Gate Leakage (pA)		g_{fs} Typ (mS)			C_{iss} Max (pF)
			Min	Max	Min	Max	Typ	Max	$I_D = 1$ mA	$I_D = 10$ mA	$I_D = 25$ mA	
TO-226AA (TO-92)												
PN4391	-40	30	-4	-10	50	150	-5	-1,000	6			16
PN4392		60	-2	-5	25	100	-5	-1,000	6			16
PN4393		100	-0.5	-3	5	60	-5	-1,000	6			16
TO-236 (SOT-23)												
SST108	-25	8	-3	-10	80		-10	-3,000		17		85
SST109		12	-2	-6	40		-10	-3,000		17		85
SST110		18	-0.5	-4	10		-10	-3,000		17		85
SST111	-35	30	-3	-10	20		-5	-1,000	6			12
SST4391		30	-4	-10	50		-5	-100	6			16
SST112		50	-1	-5	5		-5	-1,000	6			12
SST4392		60	-2	-5	25		-5	-100	6			16
SST113		100		-3	2		-5	-1,000	6			12
SST4393		100	-0.5	-3	5		-5	-100	6			16
TO-206AA (TO-18), TO-206AC (TO-52)												
2N5432	-25	5	-4	-10	150		-5	-200		17		30
2N5433		7	-3	-9	100		-5	-200		17		30
2N5434		10	-1	-4	30		-5	-200		17		30
U290	-30	3	-4	-10	500		-20	-1000			55	160
U291		7	-1.5	-4.5	200		-20	-1000			55	160
2N4859JAN/ TX/TXV	-30	25	-4	-10	50		-5	-250				18
2N4860JAN/ TX/TXV		40	-2	-6	20	100	-5	-250				18
2N4861JAN/ TX/TXV		60	-0.8	-4	8	80	-5	-250				18
2N4856A	-40	25	-4	-10	50		-5	-250	6			10
2N4856JAN/ TX/TXV		25	-4	-10	50		-5	-250				18
2N4391		30	-4	-10	50	150	-5	-100	6			14
2N4857A		40	-2	-6	20	100	-5	-250	6			10
2N4857JAN/ TX/TXV		40	-2	-6	20	100	-5	-250				18
2N4392		60	-2	-5	25	75	-5	-100	6			14
2N4858A		60	-0.8	-4	8	80	-5	-250	6			10

JFETs—N-Channel JFET Duals

Part Number	Breakdown Voltage Min (V)	$ V_{GS1}-V_{GS2} $		Gate Leakage Max (pA)	g_{fs} (mS)		I_{DSS} (mA)		$V_{GS(off)}$ Max (V)	C_{iss} Max (pF)	Package	Comments
		Max (mV)	Drift (μ V/ $^{\circ}$ C)		Min	Max	Min	Max				
SST404	-40	15	25	-15	1	2	0.5	10	-2.5	8	SO-8	Low Noise
SST406		40	80	-15	1	2	0.5	10	-2.5	8	SO-8	Low Noise
SST440	-25	10	10*	-500	4.5	9	6	30	-6	3.5*	SO-8	High Gain/Freq.
SST441		20	10*	-500	4.5	9	6	30	-6	3.5*	SO-8	High Gain/Freq.
U401	-40	5	10	-15	1	2	0.5	10	-2.5	8	TO-71	Low Noise
U404		15	25	-15	1	2	0.5	10	-2.5	8	TO-71	Low Noise
U406		40	80	-15	1	2	0.5	10	-2.5	8	TO-71	Low Noise
U421		10	10	-0.25	0.12	0.35	0.06	1	-2	3	TO-78	Ultra Low Leak.
U423		25	40	-0.25	0.12	0.35	0.06	1	-2	3	TO-78	Ultra Low Leak.
U430		25*		-15*	10		12	30	-4	5	TO-78	High Freq./ Low Noise
U431	-25	25*		-15*	10		24	60	-6	5	TO-78	High Freq./ Low Noise
U440		10	20*	-500	4.5	9	6	30	-6	3*	TO-71	High Gain
U441		20	20*	-500	4.5	9	6	30	-6	3*	TO-71	High Gain

Part Number	Breakdown Voltage Min (V)	V _{GS1} -V _{GS2}		Gate Leakage Max (pA)	g _{fs} (mS)		I _{DSS} (mA)		V _{GS(off)} Max (V)	C _{iss} Max (pF)	Package	Comments
		Max (mV)	Drift (μV/°C)		Min	Max	Min	Max				
2N3958	-50	25	100	-50	1	3	0.5	5	-4.5	4	TO-71	Tight Match Low I _G
2N5196		5	5	-15	0.7	1.6	0.7	7	-4	6	TO-71	Tight Match Low I _G
2N5197		5	10	-15	0.7	1.6	0.7	7	-4	6	TO-71	Tight Match Low I _G
2N5198		10	20	-15	0.7	1.6	0.7	7	-4	6	TO-71	General Purpose
2N5199	-50	15	40	-15	0.7	1.6	0.7	7	-4	6	TO-71	General Purpose
2N5545 JANTX/ TXV		5	10	-50	1.5	6	0.5	8	-4.5	6	TO-71	Military Hi-Rel
2N5546 JANTX/ TXV		10	20	-50	1.5	6	0.5	8	-4.5	6	TO-71	Military Hi-Rel
2N5547 JANTX/ TXV		15	40	-50	1.5	6	0.5	8	-4.5	6	TO-71	Military Hi-Rel
2N5564	-40	5	10	-3*	7.5	12.5	5	30	-3	12	TO-71	High Gain
2N5565		10	25	-3*	7.5	12.5	5	30	-3	12	TO-71	High Gain
2N5566		20	50	-3*	7.5	12.5	5	30	-3	12	TO-71	High Gain
2N5911	-25	10	20	-100	5	10	7	40	-5	5	TO-78	High Gain
2N5912		15	40	-100	5	10	7	40	-5	5	TO-78	High Gain

* Typical Value

JFETs—N-Channel Voltage-Controlled Resistors

Part Number	Breakdown Voltage Min (V)	r _{DS(on)} (Ω)		V _{GS(off)} (V)		Gate Leakage Max (pA)	Package
		Min	Max	Min	Max		
VCR2N	-25	20	60	-3.5	-7	-5000	TO-206AA
VCR4N	-25	200	600	-3.5	-7	-200	TO-206AA
VCR7N	-25	4000	8000	-2.5	-5	-100	TO-206AF

JFETs—P-Channel JFET Amplifiers

Part Number	Brkdown Voltage Min (V)	I _{DSS} (mA)		g _{fs} (mS)		V _{GS(off)} (V)		Gate Leakage (pA)		C _{iss} Typ (pF)
		Min	Max	Min	Max	Min	Max	Typ	Max	
TO-220AA (TO-92)										
J270	30	-2	-15	6	15	0.5	2	10	200	20
J271		-6	-50	8	18	1.5	4.5	10	200	20
2N5460	40	-1	-5	1	4	0.75	6	3	5000	4.5
2N5461		-2	-9	1.5	5	1	7.5	3	5000	4.5
2N5462		-4	-16	2	6	1.8	9	3	5000	4.5
TO-236 (SOT-23)										
SST270	30	-2	-15	6	15	0.5	2	10	200	20
SST271		-6	-50	8	18	1.5	4.5	10	200	20

JFETs—P-Channel JFET Analog Switches

Part Number	Brkdown Voltage Min (V)	r _{DS(on)} Max (Ω)	V _{GS(off)} (V)		I _{DSS} (mA)		Gate Leakage (pA)		g _{fs} (mS)	C _{iss} Typ (pF)
			Min	Max	Min	Max	Typ	Max	Typ	
TO-220AA (TO-92)										
P1086	30	75		10	-10		10	2000	4.5*	20
J174		85	5	10	-20	-135	10	1000	4.5*	20
J175		125	3	6	-7	-70	10	1000	4.5*	20
P1087		150		5	-5		10	2000	4.5*	20
J176		250	1	4	-2	-35	10	1000	4.5*	20
J177		300	0.8	2.25	-1.5	-20	10	1000	4.5*	20
TO-236 (SOT-23)										
SST174	30	85	5	10	-20	-135	10	1000	4.5*	20
SST175		125	3	6	-7	-70	10	1000	4.5*	20
SST176		250	1	4	-2	-35	10	1000	4.5*	20
SST177		300	0.8	2.25	-1.5	-20	10	1000	4.5*	20
TO-206AA (TO-18)										
2N5114	30	75	5	10	-30	-90	5	500	4.5*	20
2N5114JAN/JANTX/ JANTXV		75	5	10	-30	-90	5	500	4.5*	20
2N5115		100	3	6	-15	-60	5	500	4.5*	20
2N5115JAN/JANTX/ JANTXV		100	3	6	-15	-60	5	500	4.5*	20
2N5116		150	1	4	-5	-25	5	500	4.5*	20
2N5116JAN/JANTX/ JANTXV		150	1	4	-5	-25	5	500	4.5*	20

*Typical Value at V_{DS} = -15 V, I_D = -1 mA, f = 1 KHz

N-Channel Lateral DMOS FET Switches

Part Number	V _{(BR)DS} Min (V)	V _{(BR)SD} Min (V)	r _{DS(on)} * Typ (Ω)	t _r Max (ns)	V _{GS(th)} (V)		Package	Comments
					Min	Max		
Single Configuration								
SD210DE	30	10	30	1	0.5	1.5	TO-206AF	
SD211DE		10	30	1	0.5	1.5	TO-206AF	Zenered Gate
SST211		10	30	1	0.5	1.5	TO-253	Zenered Gate
SD213DE	10	10	30	1	0.1	1.5	TO-206AF	Zenered Gate
SST213		10	30	1	0.1	1.5	TO-253	Zenered Gate
SD214DE	20	20	30	1	0.1	1.5	TO-206AF	
SD215DE		20	30	1	0.1	1.5	TO-206AF	Zenered Gate
SST215		20	30	1	0.1	1.5	TO-253	Zenered Gate
Quad Configuration								
SD5000N	20	20	30	1	0.1	1.5	16-Pin Plastic DIP	Zenered Gate
SD5000I		20	30	1	0.1	1.5	16-Pin Sidebraze	Zenered Gate
SD5400CY		20	30	1	0.1	1.5	14-Pin SOIC	Zenered Gate