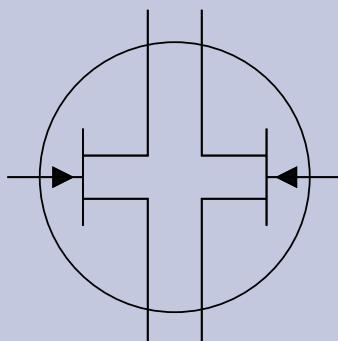
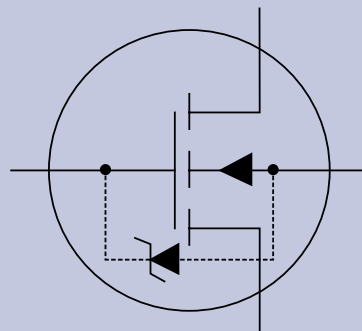


## SMALL SIGNAL DISCRETE SEMICONDUCTORS

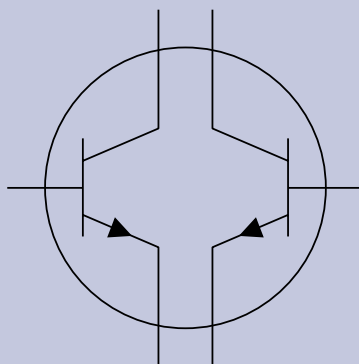
*JFETs*



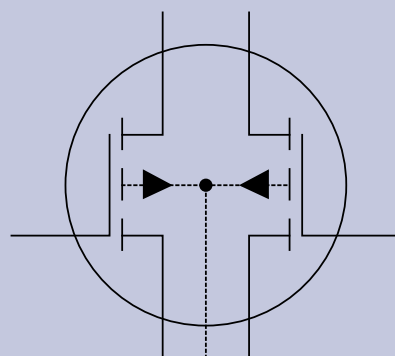
*DMOS Switches*



*BJTs*



*MOSFETs*



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# Introduction

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Linear Integrated Systems is a U.S. based, full service semiconductor manufacturer of specialty linear products. Since 1987, we have been supplying pin for pin replacements for over 2000 discrete devices which are currently offered or were discontinued by Calogic, Interfet, Intersil, Micro Power Systems, Motorola, National, Fairchild, Phillips, and Siliconix-Vishay. We strive to provide our customers with the necessary options, solutions, and technology to produce leadership end products.

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## Product Line Highlights

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### Lateral DMOS Switches

- Ultra Fast Switching ( $t_{ON}=1\text{ns typ}$ )
- N-Channel Enhancement Mode
- Single and Monolithic Quad Packages
- Available with Internal ESD Protection Diodes
- Low Capacitance ( $C_{RSS}=0.5\text{pf max}$ )
- Additional Screening Available
- Second Source for Siliconix

### BJTs:

- NPN and PNP
- Tight Matching ( $\Delta V_{BE}=0.5\text{mV max}$ )
- Single and Monolithic Dual Packages
- General Purpose Versions ( $BV_{CEO}=25\text{-}60\text{V min}$ )
- Log Conformance Versions ( $r_e=1.5\Omega \text{ max}$ )
- Super Beta Versions ( $\beta=1000\text{-}2000 \text{ min}$ )
- Additional Screening Available
- Second Source for ADI, Intersil, Motorola, & National

### BiFET Amplifier:

- Monolithic: P-Channel MOSFET Input & NPN Driver
- High Input Impedance ( $R_{gs}=100\text{G}\Omega \text{ min}$ )
- Low Noise ( $e_n=25\mu\text{V typ}$ )
- High Gain ( $Y_{fs}=30,000\mu\text{S min}$ )

### Current Regulating Diodes:

- Nominal Current From 0.192 to 5.6mA
- Biasing Not Required
- Second Source for Siliconix

### JFETs:

- Single and Monolithic Dual Packages
- N-Channel Amplifiers
- Tight Matching ( $\Delta V_{gs}=0.1\text{mV max}$ )
- Ultra Low Noise Versions ( $e_n=3\text{nv}/\sqrt{\text{Hz typ}}$ )
- High Frequency Versions
- High Impedance Versions ( $I_G=0.2\text{pA typ}$ )
- Low Leakage Versions ( $I_{GSS}=1\text{pA max}$ )
- N and P Channel Single Switches
- Additional Screening Available
- Second Source for Motorola, National, & Siliconix

### Low Leakage Diodes:

- Low Leakage Current ( $I_R=1 \text{ to } 500\text{pA}$ )
- Single and Monolithic Dual Packages
- Second Source for Intersil, National, & Siliconix

### MOSFETs:

- P-Channel: Single and Monolithic Dual Packages
- N-Channel: Single Packages
- Enhancement Mode Amplifiers
- Second Source for Intersil & Siliconix

### Photo FET

- Light Sensitive N-Channel JFET
- Second Source for Crystalonics

### Voltage Controlled Resistor:

- Monolithic Dual N-Channel JFET
- Second Source for Siliconix

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## Contacts

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To receive sales literature, quotations, samples, spice models, and technical support, please visit our website at <http://www.linearsystems.com>, or contact the Linear Integrated Systems world wide sales office:

Linear Integrated Systems, Inc (Linear Systems)  
4042 Clipper Court  
Fremont, California, USA, 94538-6540  
Business Hours: 7:00am to 6:00pm (PST)

Toll Free: 800-359-4023  
Tel: 510-490-9160  
Fax: 510-353-0261  
Email: [sales@linearsystems.com](mailto:sales@linearsystems.com)

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## Life Support Application Policy

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LIS products are not sold for applications in any medical equipment intended for use as a component of any life support system unless a specific written agreement pertaining to such intended use is executed between the manufacturer and LIS.

# Junction Field Effect Transistors

## Monolithic Dual Amplifiers

### N Channel

P/N	$e_n$ nV/ $\sqrt{\text{Hz}}$ max	$\Delta V_{GS}$ mV max	$BV_{GSS}$ V min	$I_{DSS}$ mA min	$I_{GSS}$ pA max	$g_{fs}$ $\mu\text{S}$ min	PKG.
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#### LOW NOISE

LS840	10	5	-60	0.5	-100	1000	K1,K3,K5,K7,K8
LS841	10	10	-60	2	-100	1000	K1,K3,K5,K7,K8
LS842	10	25	-60	5	-100	1000	K1,K3,K5,K7,K8
LS843	7	1	-60	1.5	-100	1500	K1,K3,K5,K7,K8
LS844	7	5	-60	5	-100	1500	K1,K3,K5,K7,K8
LS845	7	15	-60	15	-100	1500	K1,K3,K5,K7,K8

#### HIGH FREQUENCY

2N/SST5911	20	10	-25	7	-50	4000	K1,K3,K4, K5,K6,K7,K8
2N/SST5912	20	15	-25	7	-50	4000	K1,K3,K4, K5,K6,K7,K8
2N/SST5912C	20	40	-25	7	-50	4000	K1,K3,K4, K5,K6,K7,K8
U/SST440	20	10	-25	6	-500	4500	K1,K6
U/SST441	20	20	-25	6	-500	4500	K1,K6

#### LOW LEAKAGE / HIGH IMPEDANCE

LS830	70	25	-40	0.06	-1.0	70	K1,K3,K5,K7,K8
LS831	70	25	-40	0.06	-1.0	70	K1,K3,K5,K7,K8
LS832	70	25	-40	0.06	-1.0	70	K1,K3,K5,K7,K8
LS833	70	25	-40	0.06	-1.0	70	K1,K3,K5,K7,K8
LS5905	70	15	-40	0.06	-5.0	70	K1,K3,K5,K7,K8
LS5906	70	5	-40	0.06	-2.0	70	K1,K3,K5,K7,K8
LS5907	70	5	-40	0.06	-2.0	70	K1,K3,K5,K7,K8
LS5908	70	10	-40	0.06	-2.0	70	K1,K3,K5,K7,K8
LS5909	70	15	-40	0.06	-2.0	70	K1,K3,K5,K7,K8
U421	70	10	-40	0.06	-1.0	300	K2,K3,K5
U422	70	15	-40	0.06	-1.0	300	K2,K3,K5
U423	70	25	-40	0.06	-1.0	300	K2,K3,K5
U424	70	10	-40	0.06	-3.0	300	K2,K3,K5
U425	70	15	-40	0.06	-3.0	300	K2,K3,K5
U426	70	25	-40	0.06	-3.0	300	K2,K3,K5

#### GENERAL PURPOSE

U/SST401	20	5	-50	0.5	-100	2000	K1,K4,K6,K7,K8
U/SST402	20	10	-50	0.5	-100	2000	K1,K4,K6,K7,K8
U/SST403	20	10	-50	0.5	-100	2000	K1,K4,K6,K7,K8
U/SST404	20	15	-50	0.5	-100	2000	K1,K4,K6,K7,K8
U/SST405	20	20	-50	0.5	-100	2000	K1,K4,K6,K7,K8
U/SST406	20	40	-50	0.5	-100	2000	K1,K4,K6,K7,K8
2N3954	15	5	-60	0.5	-100	1000	K1,K3,K5,K7,K8
2N3954A	15	5	-60	0.5	-100	1000	K1,K3,K5,K7,K8
2N3955	15	10	-60	0.5	-100	1000	K1,K3,K5,K7,K8
2N3956	15	15	-60	0.5	-100	1000	K1,K3,K5,K7,K8
2N3958	15	25	-60	0.5	-100	1000	K1,K3,K5,K7,K8

## Single Amplifiers

### N Channel

P/N	$e_n$ nV/ $\sqrt{\text{Hz}}$ typ	$V_{GS(off)}$ V max	$BV_{GSS}$ V min	$I_{DSS}$ mA min	$I_{GSS}$ pA max	$g_{fs}$ $\mu\text{S}$ min	PKG.
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#### LOW NOISE

J/SST201	6	-1.5	-40	0.2	-100	500	F4,F7
J/SST202	6	-4.0	-40	0.9	-100	1000	F4,F7
LS846	11	-3.5	-60	1.5	-100	1000	F4,F7

#### HIGH FREQUENCY

2N/PN/SST4416	6	-6.0	-30	5	-100	4500	F3,F6,F7
2N/PN/SST4416A	6	-6.0	-35	5	-100	4500	F3,F6,F7
J/SST210	10	-3.0	-25	2	-100	4000	F4,F7
J/SST211	10	-4.5	-25	7	-100	6000	F4,F7
J/SST212	10	-6.0	-25	15	-100	7000	F4,F7
J/SST/U308	6	-6.5	-25	12	-1000	8000	F1,F4,F7
J/SST/U309	6	-4.0	-25	12	-1000	10000	F1,F4,F7
J/SST/U310	6	-6.5	-25	24	-1000	8000	F1,F4,F7

#### LOW LEAKAGE / HIGH IMPEDANCE

2N/PN/SST4117	15	-1.8	-40	0.03	-10	70	F3,F4,F7
2N/PN/SST4117A	15	-1.8	-40	0.03	-1	70	F3,F4,F7
2N/PN/SST4118	15	-3.0	-40	0.08	-10	80	F3,F4,F7
2N/PN/SST4118A	15	-3.0	-40	0.08	-1	80	F3,F4,F7
2N/PN/SST4119	15	-6.0	-40	0.20	-10	100	F3,F4,F7
2N/PN/SST4119A	15	-6.0	-40	0.20	-1	100	F3,F4,F7
2N/PF5301	45	-3.0	-30	0.03	-1	70	F3,F4

## Single Switches

P/N	$R_{DS(on)}$ $\Omega$ max	$V_{GS(off)}$ V max	$I_{DSS}$ mA min	$I_{GSS}$ pA max	$BV_{GSS}$ V min	$C_{RSS}$ pF max	PKG.
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#### N-CHANNEL

2N/PN/SST4391	30	-10	50	-100	-40	3.5	F1,F4,F7
2N/PN/SST4392	60	-5	25	-100	-40	3.5	F1,F4,F7
2N/PN/SST4393	100	-3	5	-100	-40	3.5	F1,F4,F7
J/SST108	8	-10	80	-3000	-25	15	F4,F7
J/SST109	12	-6	40	-3000	-25	15	F4,F7
J/SST110	15	-4	10	-3000	-25	15	F4,F7
J/SST111	30	-10	20	-1000	-35	5	F4,F7
J/SST112	50	-5	5	-1000	-35	5	F4,F7
J/SST113	100	-3	2	-1000	-35	5	F4,F7

#### P-CHANNEL

2N5018	75	10	-10	2000	30	7	F2
2N5019	150	5	-5	2000	30	7	F2
2N5114	75	10	-30	500	30	7	F2
2N5115	100	6	-15	500	30	7	F2
2N5116	150	4	-5	500	30	7	F2
J/SST174	85	10	-20	1000	30	7	F5,F9
J/SST175	125	6	-7	1000	30	7	F5,F9
J/SST176	250	4	-2	1000	30	7	F5,F9
J/SST177	300	2.25	-1.5	1000	30	7	F5,F9

# Field Effect Transistors

## Lateral DMOS FET Switches

### N Channel Enhancement Mode

P/N	$R_{DS(on)}$ $\Omega$ max	$t_{ON}$ ns max	$BV_{DS}$ V min	$C_{RSS}$ pF max	Protection Diode	PKG.
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#### SINGLE

SD210DE	45	2.0	30	0.5	NO	L7
SD211DE	45	2.0	30	0.5	YES	L6
SD213DE	45	2.0	10	0.5	YES	L6
SD214DE	45	2.0	20	0.5	NO	L7
SD215DE	45	2.0	20	0.5	YES	L6
SST210	50	2.0	30	0.5	NO	L5
SST211	50	2.0	30	0.5	YES	L4
SST213	50	2.0	10	0.5	YES	L4
SST214	50	2.0	20	0.5	NO	L5
SST215	50	2.0	20	0.5	YES	L4
SST823	5.0	2.0	25	5.0	YES	L4
SST824	5.0	2.0	25	5.0	YES	L4

#### MONOLITHIC QUAD

SD5000I	70	2.0	20	0.5	YES	L2
SD5000N	70	2.0	20	0.5	YES	L1,L8,L9
SD5001N	70	2.0	10	0.5	YES	L1,L8,L9
SD5400CY	75	2.0	20	0.5	YES	L3
SD5401CY	75	2.0	10	0.5	YES	L3

## MOSFETs

### N & P Channel Enhancement Mode

P/N	$V_{GS(TH)}$ V min	$BV_{DS}$ V min	$R_{DS(on)}$ $\Omega$ max	$I_{D(on)}$ mA min	$I_{GSS}$ pA max	CH.	PKG.
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#### SINGLE

2N4351	1.0	25	300	3	10	N	M2
2N4352	1.0	25	300	3	10	N	M2
3N163	-3.0	-40	250	-5	$\pm 10$	P	M1
3N164	-3.0	-30	300	-3	$\pm 10$	P	M1
3N170	1.0	25	200	10	10	N	M2
3N171	1.5	25	200	10	10	N	M2

#### MONOLITHIC DUAL

3N165	-2.0	-40	300	-5	$\pm 10$	P	M3
3N166	-2.0	-30	300	-5	$\pm 10$	P	M3
3N190	-2.0	-30	300	-5	$\pm 10$	P	M4
3N191	-2.0	-30	300	-5	$\pm 10$	P	M4

# Bipolar Junction Transistors

## Monolithic Dual NPN

P/N	$h_{FE}$ min	$\Delta V_{BE}$ mV max	$BV_{CBO}$ V min	$I_C$ mA max	$C_{OBO}$ pF max	$f_t$ MHz min	PKG.
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IT120A	225	1	45	10	2	220	B1,B2,B3,B4,B7
IT120	225	2	45	10	2	220	B1,B2,B3,B4,B7
IT121	100	3	45	10	2	180	B1,B2,B3,B4,B7
IT122	100	5	45	10	2	180	B1,B2,B3,B4,B7
IT124	1500	5	2	10	2	100	B1,B2,B3,B4,B7
LS310	150	3	25	10	2	200	B1,B2,B3,B4,B7
LS311	150	1	45	10	2	200	B1,B2,B3,B4,B7
LS312	200	0.5	60	10	2	200	B1,B2,B3,B4,B7
LS313	400	1	45	10	2	200	B1,B2,B3,B4,B7
LS3250A	150	2	45	150	2	600	B1,B2,B3,B4,B7
LS3250B	100	5	40	150	2	600	B1,B2,B3,B4,B7
LS3250C	50	10	20	150	2	600	B1,B2,B3,B4,B7

## Single NPN

P/N	$h_{FE}$ @1mA min	$h_{FE}$ @10mA min	$BV_{CBO}$ V min	$I_C$ mA max	$C_{OBO}$ pF max	$f_t$ MHz min	PKG.
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LS3250SA	150	120	45	150	2	600	B5,B6
LS3250SB	100	80	40	150	2	600	B5,B6
LS3250SC	50	40	20	150	2	600	B5,B6

## Monolithic Dual NPN Super Beta

P/N	$h_{FE}$ min	$\Delta V_{BE}$ mV max	$BV_{CBO}$ V min	$I_C$ mA max	$C_{OBO}$ pF max	$f_t$ MHz min	PKG.
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LS301	2000	1	18	5	2	100	B1,B2,B3,B4,B7
LS302	1000	1	35	5	2	100	B1,B2,B3,B4,B7
LS303	2000	1	10	5	2	100	B1,B2,B3,B4,B7

## Monolithic Dual PNP

P/N	$h_{FE}$ min	$\Delta V_{BE}$ mV max	$BV_{CBO}$ V min	$I_C$ mA max	$C_{OBO}$ pF max	$f_t$ MHz min	PKG.
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IT130A	225	1	-45	-10	2	110	B1,B2,B3,B4,B7
IT130	225	2	-45	-10	2	110	B1,B2,B3,B4,B7
IT131	100	3	-45	-10	2	90	B1,B2,B3,B4,B7
IT132	100	5	-45	-10	2	90	B1,B2,B3,B4,B7
LS350	100	5	-25	-10	2	200	B1,B2,B3,B4,B7
LS351	150	1	-45	-10	2	200	B1,B2,B3,B4,B7
LS352	200	0.5	-60	-10	2	200	B1,B2,B3,B4,B7
LS3550A	150	2	-45	-50	2	600	B1,B2,B3,B4,B7
LS3550B	100	5	-40	-50	2	600	B1,B2,B3,B4,B7
LS3550C	50	10	-20	-50	2	600	B1,B2,B3,B4,B7

## Single PNP

P/N	$h_{FE}$ @1mA min	$h_{FE}$ @10mA min	$BV_{CBO}$ V min	$I_C$ mA max	$C_{OBO}$ pF max	$f_t$ MHz min	PKG.
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LS3550SA	150	120	-45	-50	2	600	B5,B6
LS3550SB	100	80	-40	-50	2	600	B5,B6
LS3550SC	50	40	-20	-50	2	600	B5,B6

## Monolithic Dual Log Conformance

P/N	$h_{FE}$ min	$r_e$ $\Omega$	$\Delta V_{BE}$ mV max	$BV_{CBO}$ V min	$I_C$ mA max	Type	PKG.
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LS318	150	1.5	1	25	10	NPN	B1,B2,B3,B4,B7
LS358	100	1.5	1	-20	-10	PNP	B1,B2,B3,B4,B7

# Other Discrete Devices

## Low Leakage Diodes

P/N	$I_R$ pA max	$V_F$ V typ	$BV_R$ V min	$C_R$ pF max	PKG.
<b>SINGLE</b>					
JPAD5	-5	0.8	-35	2	D1
JPAD10	-10	0.8	-35	2	D1
JPAD20	-20	0.8	-35	2	D1
JPAD50	-50	0.8	-35	2	D1
JPAD100	-100	0.8	-35	2	D1
JPAD200	-200	0.8	-35	2	D1
JPAD500	-500	0.8	-35	2	D1
PAD1	-1	0.8	-45	0.8	D2
PAD2	-2	0.8	-45	0.8	D2
PAD5	-5	0.8	-45	0.8	D2
PAD10	-10	0.8	-35	2	D2
PAD20	-20	0.8	-35	2	D2
PAD50	-50	0.8	-35	2	D2
PAD100	-100	0.8	-35	2	D2
SSTPAD5	-5	0.8	-30	2	D7
SSTPAD10	-10	0.8	-30	2	D7
SSTPAD20	-20	0.8	-30	2	D7
SSTPAD50	-50	0.8	-30	2	D7
<b>MONOLITHIC DUAL</b>					
DPAD1	-1	0.8	-45	0.8	D4
DPAD2	-2	0.8	-45	2	D3
DPAD5	-5	0.8	-45	2	D3
DPAD10	-10	0.8	-45	2	D3
DPAD20	-20	0.8	-45	2	D3
DPAD50	-50	0.8	-45	2	D3
DPAD100	-100	0.8	-45	2	D3
ID100	-10	0.8	-30	1	D5
ID101	-10	0.8	-30	1	D6
SSTD PAD5	-5	0.8	-30	4	D8

## Current Regulators

P/N	$I_F$ mA min	$I_F$ mA max	$V_L$ V max	$P_{OV}$ V min	$Z_d$ M $\Omega$ typ	$Z_k$ M $\Omega$ typ	PKG.
J/SST500	0.192	0.288	1.2	50	15	2.5	F7,F8
J/SST501	0.264	0.396	1.3	50	10	1.6	F7,F8
J/SST502	0.344	0.516	1.5	50	7.0	1.1	F7,F8
J/SST503	0.448	0.672	1.7	50	5.0	0.8	F7,F8
J/SST504	0.600	0.900	1.9	50	3.5	0.55	F7,F8
J/SST505	0.800	1.200	2.1	50	2.0	0.40	F7,F8
J/SST506	1.120	1.680	2.5	50	1.5	0.25	F7,F8
J/SST507	1.440	2.160	2.8	50	1.0	0.19	F7,F8
J/SST508	1.900	2.900	3.1	50	0.7	0.13	F7,F8
J/SST509	2.400	3.600	3.5	50	0.5	0.09	F7,F8
J/SST510	2.900	4.300	3.9	50	0.4	0.07	F7,F8
J/SST511	3.800	5.600	4.2	50	0.3	0.05	F7,F8

## Voltage Controlled Resistor

P/N	$V_{GS(off)}$ V min	$BV_{GSS}$ V min	$r_{ds(on)}$ $\Omega$ min	$r_{ds(on)}$ $\Omega$ max	PKG.
VCR11N	-8	-25	70	200	K1

## Photo FET

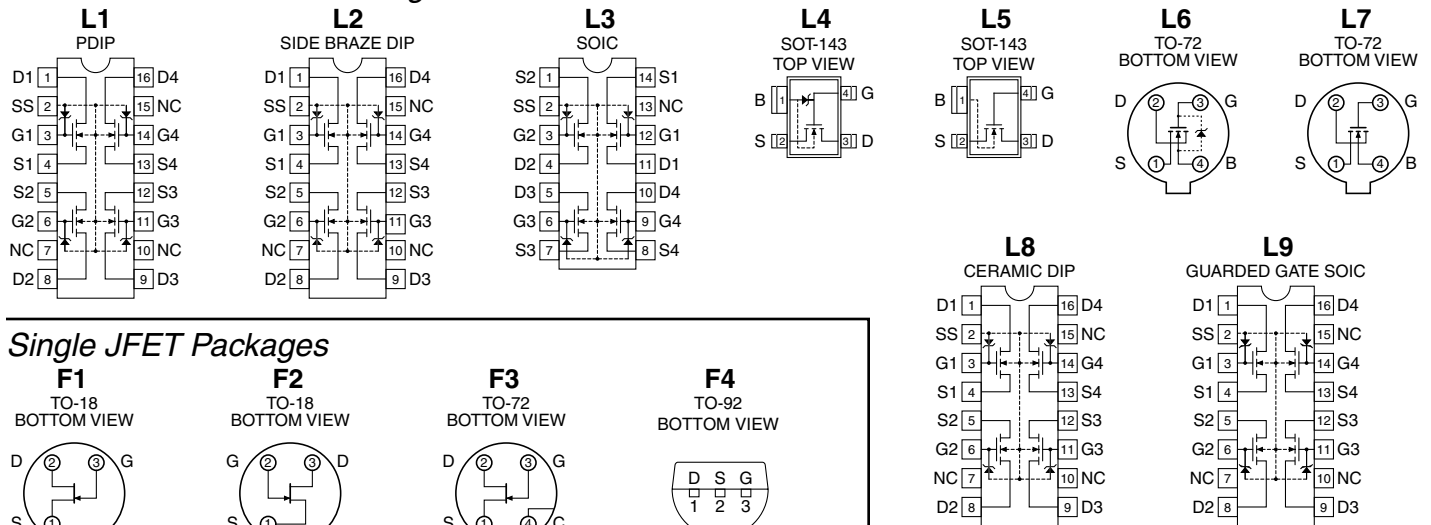
P/N	$V_{GS(off)}$ V min	$I_{GSS}$ pA max	$S_G$ $\mu\text{AmWcm}^2$ min	$R_{DS(on)}$ $\Omega$ typ	PKG.
LS627	-1	-30	6.4	100	F3

## BiFET Amplifier

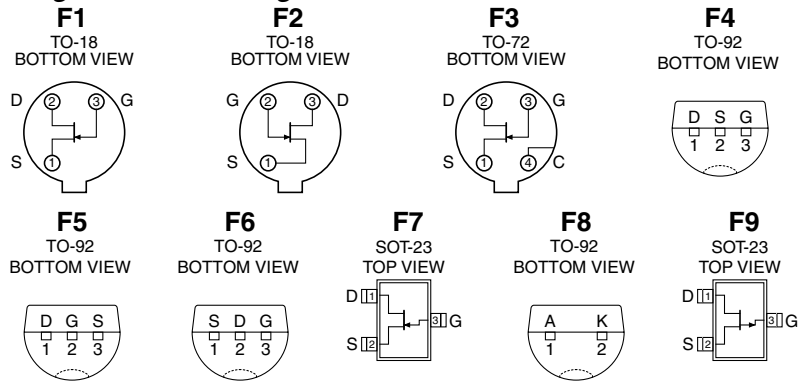
P/N	$V_{GS(off)}$ V typ	$BV_{GSS}$ V min	$e_n$ $\mu\text{V}$ typ	$g_{fs}$ $\mu\text{S}$ min	$C_{RS}$ pF typ	PKG.
LS320	-10	-20	25	30000	1.5	A1,A2,A3

# Package Options

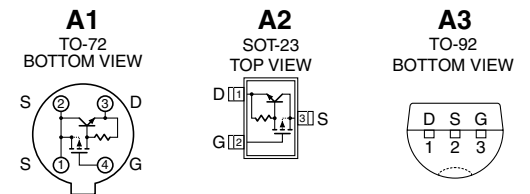
## Lateral DMOS Switch Packages



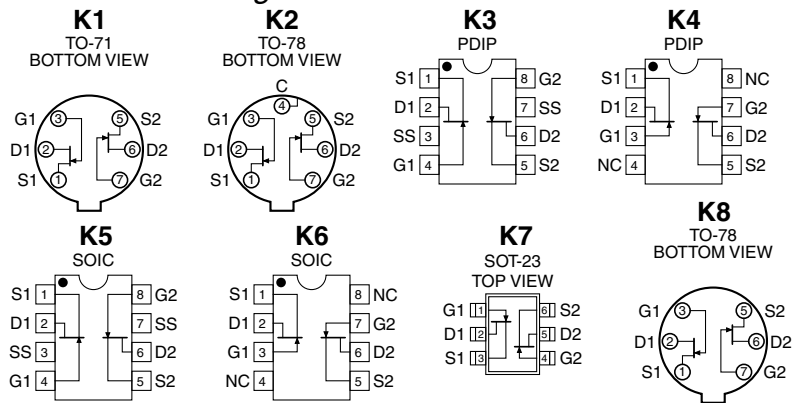
## Single JFET Packages



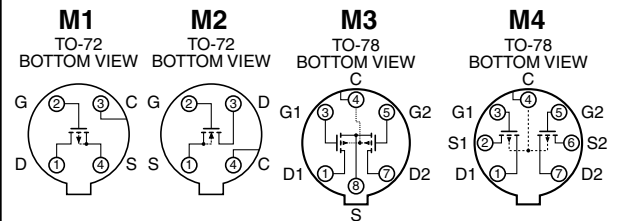
## BiFET Amplifier Packages



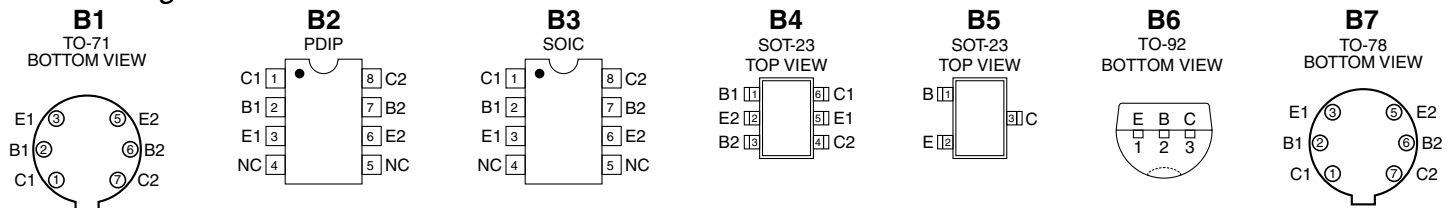
## Dual JFET Packages



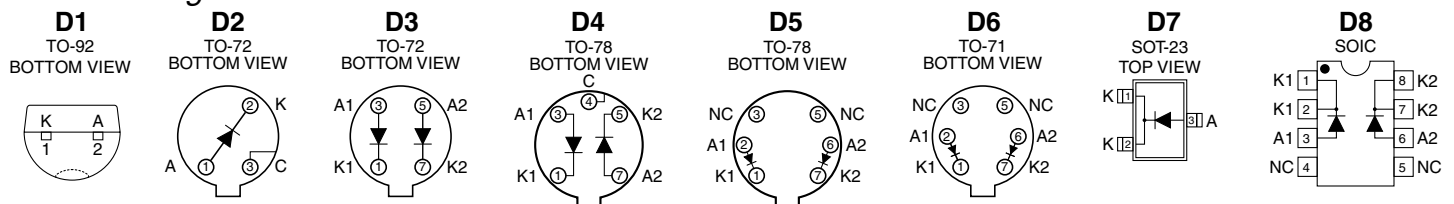
## MOSFET Packages



## BJT Packages



## Diode Packages



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Industry #	LIS #	Industry #	LIS #	Industry #	LIS #	Industry #	LIS #	Industry #	LIS #	Industry #	LIS #
100S	LS845	204S	LS842	2N2920	LS312	2N3517	LS122	2N4021	LS132	2N4937	LS351
102M	LS5912	2078A	LS3955	2N2920A	LS312	2N3521	LS122	2N4022	LS132	2N4937	LS351
102S	LS842	2079A	LS3955	2N2936	LS120	2N3522	LS122	2N4023	LS312	2N4938	LS351
103M	LS842	2080A	LS841	2N2937	LS120	2N3587	LS122	2N4024	LS312	2N4939	LS351
103S	LS842	2081A	LS841	2N2972	LS122	2N3608	LS3N163	2N4025	LS312	2N4940	LS132
104M	LS842	2098A	LS841	2N2973	LS122	2N3680	LS120	2N4044	LS312	2N4941	LS131
105M	LS842	2099A	LS841	2N2974	LS120	2N3684	LS842	2N4045	LS312	2N4942	LS132
105U	LS845	210U	LS5912	2N2975	LS120	2N3685	LS842	2N4082	LS3954	2N4955	LS122
106M	LS5912	2130U	LS840	2N2976	LS120	2N3686	LS842	2N4083	LS3955	2N4956	LS122
107M	LS5912	2132U	LS3955	2N2977	LS120	2N3687	LS842	2N4084	LS845	2N4977	LSJ108
110U	LS842	2134U	LS3956	2N2978	LS120	2N3726	LS131	2N4085	LS845	2N4978	LSJ108
115U	LS842	2136U	LS3955	2N2979	LS120	2N3727	LS130	2N4091	LS4391	2N4979	LSJ110
120U	LS842	2138U	LS3958	2N2980	LS121	2N3728	LS122	2N4091A	LS4391	2N5018	LS4391
1227A	LS842	2139U	LS3958	2N2981	LS122	2N3729	LS121	2N4092	LS4392	2N5019	LS4391
125U	LS842	2147U	LS3958	2N2982	LS122	2N3800	LS132	2N4092A	LS4392	2N5045	LS840
1278A	LS842	2148U	LS3958	2N3044	LS122	2N3801	LS132	2N4093	LS4392	2N5046	LS840
1279A	LS842	2149U	LS3958	2N3045	LS122	2N3802	LS132	2N4093A	LS4392	2N5047	LS840
1280A	LS5912	231S	LS3954	2N3046	LS121	2N3803	LS132	2N4100	LS312	2N5090	LS122
1281A	LS842	232S	LS3955	2N3047	LS122	2N3804	LS130	2N4116	LS5911	2N5103	LS5912
1282A	LS842	233S	LS3956	2N3048	LS122	2N3804A	LS130	2N4116A	LS5912	2N5104	LS5912
1283A	LS842	234S	LS3955	2N3049	LS122	2N3805	LS130	2N4117	LS5905	2N5105	LS5912
1284A	LS845	235S	LS3958	2N3050	LS122	2N3805A	LS130	2N4117A	LS5905	2N5114	LS4391
1285A	LS842	241U	LS842	2N3051	LS122	2N3806	LS352	2N4118	LS5905	2N5115	LS4392
1286A	LS845	250U	LS4391	2N3052	LS122	2N3806	LS351	2N4118A	LS5905	2N5116	LS4393
130U	LS842	251U	LS4392	2N3059	LS122	2N3807	LS352	2N4119	LS5905	2N5117	LS352
1325A	LS845	2N2060	LS120	2N3066	LS842	2N3808	LS352	2N4119A	LS5905	2N5118	LS352
135U	LS842	2N2060A	LS121	2N3067	LS842	2N3809	LS352	2N4120	LS3N163	2N5119	LS351
142T	LS4392	2N2060B	LS121	2N3068	LS842	2N3810	LS352	2N4139	LS842	2N5120	LS131
14T	LS845	2N2223A	LS121	2N3069	LS842	2N3810A	LS352	2N4220	LS845	2N5121	LS132
155U	LS5912	2N2333	LS122	2N3070	LS842	2N3811	LS352	2N4220A	LS845	2N5122	LS132
158T	LS842	2N2453	LS311	2N3071	LS842	2N3811A	LS352	2N4221	LS845	2N5123	LS131
159T	LS5912	2N2453	LS122	2N3072	LS842	2N3812	LS132	2N4221A	LS845	2N5124	LS132
1714A	LS842	2N2453A	LS121	2N3084	LS842	2N3813	LS132	2N4222	LS845	2N5125	LS132
182S	LS4391	2N2453A	LS311	2N3085	LS842	2N3814	LS132	2N4222A	LS845	2N5158	LSJ108
183S	LS842	2N2480	LS122	2N3086	LS842	2N3815	LS132	2N4223	LS5912	2N5159	LSJ110
197S	LS842	2N2480A	LS121	2N3087	LS842	2N3816	LS3N163	2N4224	LS5912	2N5196	LS840
198S	LS842	2N2639	LS120	2N3088	LS842	2N3816A	LS3N163	2N4267	LS3N163	2N5197	LS841
199S	LS842	2N2639	LS311	2N3088A	LS842	2N3817	LS130	2N4302	LS4392	2N5198	LS841
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2000M	LS842	2N2915A	LS120	2N3458	LS842	2N4011	LS132	2N4868	LS842	2N5457	LS842
2001M	LS842	2N2916	LS311	2N3459	LS842	2N4015	LS132	2N4868A	LS842	2N5458	LS842
200S	LS4392	2N2916A	LS120	2N3460	LS842	2N4016	LS312	2N4869	LS842	2N5459	LS842
200U	LS842	2N2917	LS311	2N3513	LS122	2N4017	LS132	2N4869A	LS842	2N5460	LS842
201S	LS4391	2N2918	LS311	2N3514	LS122	2N4018	LS132	2N4878	LS312	2N5461	LS842
202S	LS4392	2N2919	LS312	2N3515	LS122	2N4019	LS132	2N4879	LS312	2N5462	LS842
203S	LS842	2N2919A	LS120	2N3516	LS122	2N4020	LS132	2N4880	LS312	2N5463	LS842

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2N5484	LS5912	2N6453	LS4393	AD845	LS5911	BFY84	LS122	CR240	LS842	E414	LS841
2N5485	LS5912	2N6454	LS4393	AD846	LS5912	BFY85	LS122	CR270	LS842	E415	LS842
2N5486	LS5912	2N6483	LSU401	AD847	LS5912	BFY86	LS122	CR300	LS842	E420	LS5911
2N5515	LS840	2N6484	LSU402	BC264	LS845	BFY91	LS122	CR330	LS842	E421	LS5912
2N5516	LS841	2N6485	LSU404	BC264A	LS842	BFY92	LS122	CR360	LS842	E430	LS4391
2N5516	LS841	2N6502	LS122	BC264B	LS845	BN209	LS122	CR390	LS842	E431	LS4391
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2N5519	LS842	2N6906	LS844	BCY87	LS121	BSV79	LS4392	CR530	LS842	E502	LS845
2N5520	LS840	2N6907	LS845	BCY88	LS122	BSV80	LS4393	CRO91	LS842	E503	LS845
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2N5562	LSU402	3N158	LS3N163	BF410A	LS842	C682	LS842	D2T2904	LS132	EPAD50	LSJPAD50
2N5563	LSU404	3N158A	LS3N163	BF410B	LS842	C683	LS842	D2T2905	LS132	EPAD500	LSJPAD500
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2N5565	LS5911	3N164	LS3N164	BF410D	LS842	C684	LS845	DA102	LS840	ESM25A	LS841
2N5566	LS5912	3N165	LS3N165	BFQ10	LS844	C684A	LS845	DA402	LS840	ESM4091	LS4391
2N5592	LS842	3N166	LS3N166	BFQ11	LSU401	C685	LS845	DN5564	LS4391	ESM4092	LS4392
2N5593	LS842	3N170	LS3N170	BFQ12	LS844	C685A	LS845	DN5565	LS4391	ESM4093	LS4393
2N5594	LS842	3N171	LS3N171	BFQ13	LS844	CM600	LS4392	DN5566	LS4391	ESM4302	LS842
2N5638	LS4391	3N174	LS3N163	BFQ14	LS845	CM601	LS4391	DN5567	LS4391	ESM4303	LS845
2N5639	LS4392	703U	LS845	BFQ15	LS845	CM602	LS4391	DPAD1	LSDPAD1	ESM4304	LS845
2N5640	LS4393	704U	LS845	BFQ16	LS845	CM603	LS4391	DPAD10	LSDPAD10	FE0654A	LS5912
2N5647	LS5905	705U	LS5912	BFQ23	LS5912	CM640	LS4393	DPAD100	LSDPAD100	FE0654B	LS5912
2N5648	LS5905	707U	LS4391	BFQ26	LS844	CM641	LS4393	DPAD2	LSDPAD2	FE100	LS842
2N5649	LS5905	714U	LS842	BFQ44	LS5912	CM642	LS4393	DPAD20	LSDPAD20	FE100A	LS842
2N5793	LS122	734EU	LS5912	BFQ45	LS5912	CM643	LS4392	DPAD5	LSDPAD5	FE102	LS5905
2N5794	LS122	734U	LS5912	BFQ49	LS3958	CM644	LS4392	DPAD50	LSDPAD50	FE102A	LS5905
2N5795	LS132	751U	LS842	BFR30	LS842	CM645	LS4392	DU4339	LS842	FE104	LS5905
2N5796	LS132	752U	LS842	BFR31	LS842	CM646	LS4392	DU4340	LS842	FE104A	LS5905
2N5801	LS4393	753U	LS842	BFR45	LS5912	CM647	LS4391	E100	LS842	FE200	LS842
2N5802	LS4393	754U	LS842	BFS21	LS842	CM650	LSJ108	E101	LS842	FE202	LS842
2N5803	LS4392	755U	LS842	BFS21A	LS842	CM651	LSJ108	E102	LS842	FE204	LS842
2N5843	LS130	756U	LS842	BFS67	LS842	CM652	LSJ108	E108	LSJ108	FE300	LS842
2N5844	LS130	A050	LS844	BFS68	LS842	CM653	LSJ108	E109	LSJ109	FE302	LS842
2N5902	LS830	A192	LS5912	BFS68P	LS5912	CM697	LSJ110	E110	LSJ110	FE304	LS842
2N5903	LS830	A5T3821	LS5912	BFS70	LS842	CM800	LSJ110	E111	LS4391	FE3819	LS845
2N5904	LS830	A5T3822	LS5912	BFS71	LS842	CP643	LSJ110	E112	LS4392	FE5457	LS842
2N5905	LS5905	A5T3823	LS5912	BFS72	LS842	CP650	LSJ108	E113	LS4393	FE5458	LS842
2N5906	LS5906	AD3954	LS3954	BFS73	LS842	CP651	LSJ108	E174	LS4391	FE5459	LS842
2N5907	LS5907	AD3954A	LS3954A	BFS74	LS4391	CP652	LSJ108	E175	LS4392	FE5484	LS5912
2N5908	LS5908	AD3954A	LS3954A	BFS75	LS4392	CP653	LSJ108	E176	LS4393	FE5485QN	LS5912
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2N5911	LS5911	AD3956	LS3956	BFS77	LS4393	CR024	LS5905	E201	LS842	FM1100	LS3954
2N5912	LS5912	AD3957	LS3955	BFS78	LS4391	CR027	LS5905	E202	LS842	FM1100A	LS5906
2N5949	LS5912	AD3958	LS3958	BFS79	LS4392	CR030	LS5905	E203	LS842	FM1101A	LS5906
2N5950	LS5912	AD810	LS310	BFS80	LS5912	CR033	LS5905	E204	LS842	FM1102	LS3954
2N5951	LS5912	AD811	LS311	BFT46	LS842	CR039	LS5905	E210	LS5912	FM1102A	LS5906
2N5952	LS5912	AD812	LS312	BFW10	LS842	CR043	LS5905	E211	LS5912	FM1103	LS3955
2N5953	LS5912	AD813	LS313	BFW11	LS842	CR047	LS5905	E212	LS5912	FM1103A	LS5908
2N6085	LS122	AD814	LS302	BFW12	LS845	CR056	LS5905	E230	LS842	FM1104	LS3957
2N6086	LS122	AD815	LS301	BFW13	LS842	CR062	LS5905	E231	LS842	FM1104A	LS5909
2N6087	LS121	AD816	LS303	BFW39	LS122	CR068	LS842	E232	LS842	FM1105	LS3954
2N6088	LS121	AD820	LS350	BFW39A	LS120	CR075	LS842	E270	LS4393	FM1105A	LS832
2N6089	LS122	AD821	LS351	BFW55	LS842	CR075	LS842	E271	LS4392	FM1106	LS3954
2N6090	LS121	AD822	LS352	BFW56	LS842	CR082	LS842	E300	LS5912	FM1106A	LS832
2N6091	LS121	AD830	LS830	BFW61	LS5912	CR082	LS842	E304	LS5912	FM1107	LS3954
2N6092	LS121	AD831	LS831	BFX11	LS132	CR091	LS842	E305	LS5912	FM1107A	LS832
2N6441	LS122	AD832	LS832	BFX15	LS131	CR100	LS842	E308	LS4391	FM1108	LS3955
2N6442	LS122	AD833	LS833	BFX36	LS122	CR110	LS842	E309	LS4391	FM1108A	LS832
2N6443	LS122	AD835	LS842	BFX70	LS122	CR120	LS842	E310	LS4391	FM1109	LS3957
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2N6447	LS121	AD839	LS845	BFY20	LS122	CR160	LS842	E410	LS841	FM1111	LS3957
2N6448	LS121	AD840	LS840	BFY81	LS122	CR180	LS842	E411	LS841	FM1111A	LS5909



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Industry #	LIS #	Industry #	LIS #	Industry #	LIS #	Industry #	LIS #	Industry #	LIS #	Industry #	LIS #
FM1112	LS840	IT502	LS844	ITE3804	LS130	J230	LS842	KE4391	LS4391	LS3550C	LS3550C
FM1200	LS3954	IT503	LS845	ITE3806	LS132	J231	LS842	KE4392	LS4392	LS358	LS358
FM1201	LS3954	IT504	LS845	ITE3807	LS132	J232	LS842	KE4393	LS4393	LS3954A	LS3954A
FM1202	LS3954	IT505	LS845	ITE3808	LS132	J270	LS4393P	KE4416	LS5912	LS3954	LS3954
FM1203	LS3955	IT550	LS5912	ITE3809	LS132	J271	LS4392	KE4856	LS4391	LS3955	LS3955
FM1204	LS3955	IT5911	LS5911	ITE3810	LS130	J300A	LS5912	KE4857	LS4392	LS3956	LS3956
FM1205	LS3954	IT5912	LS5912	ITE3811	LS130	J300B	LS5912	KE4858	LS4393	LS3958	LS3958
FM1206	LS3954	ITC2975	LS120	ITE3907	LS120	J300C	LS5912	KE4859	LS4391	LS4117	LS4117
FM1207	LS3954	ITC2976	LS120	ITE3908	LS120	J300D	LS5912	KE4860	LS4392	LS4118	LS4118
FM1208	LS3955	ITC2977	LS120	ITE4017	LS132	J304	LS5912	KE4861	LS4393	LS4119	LS4119
FM1209	LS3955	ITC2978	LS120	ITE4018	LS132	J305	LS5912	KE5103	LS5912	LS4391	LS4391
FM1210	LS3955	ITC2979	LS120	ITE4019	LS132	J308	LS4391	KE5104	LS5912	LS4392	LS4392
FM1211	LS5911	ITC3347	LS312	ITE4020	LS132	J309	LS4391	KH5196	LS840	LS4393	LS4393
FM3954	LS3954	ITC3348	LS312	ITE4021	LS132	J310	LS4391	KH5197	LS841	LS5905	LS5905
FM3954A	LS3954	ITC3349	LS132	ITE4022	LS132	J401	LSU401	KH5198	LS5911	LS5906	LS5906
FM3955	LS3955	ITC3350	LS312	ITE4023	LS312	J402	LSU402	KH5199	LS845	LS5907	LS5907
FM3955A	LS3954	ITC3351	LS312	ITE4024	LS312	J403	LSU403	KK4416	LS5912	LS5908	LS5908
FM3956	LS3956	ITC3352	LS132	ITE4025	LS312	J404	LS845	LDF603	LS845	LS5909	LS5909
FM3957	LS3955	ITC3800	LS132	ITE4117	LS5905	J405	LS845	LDF604	LS845	LS5911	LS5911
FM3958	LS3958	ITC3802	LS132	ITE4118	LS5905	J406	LS845	LDF605	LS845	LS5912	LS5912
FN4117	LS5905	ITC3804	LS130	ITE4119	LS5905	J410	LS841	LM114	LS120	LS5912C	LS5912C
FN4117A	LS5905	ITC3806	LS132	ITE4338	LS842	J411	LS842	LM114A	LS312	LS823	LS823
FN4118	LS5905	ITC3807	LS132	ITE4339	LS842	J412	LS842	LM115	LS120	LS824	LS824
FN4118A	LS5905	ITC3808	LS132	ITE4340	LS842	J420	LS5911	LM194	LS120	LS830	LS830
FN4119	LS5905	ITC3809	LS132	ITE4341	LS842	J421	LS5912	LM394	LS120	LS831	LS831
FN4119A	LS5905	ITC3810	LS130	ITE4391	LS4391	J500	LS845	LSIT120	LS120	LS832	LS832
FN4119A	LS5905	ITC3811	LS130	ITE4392	LS4392	J501	LS845	LSIT120A	LS120A	LS833	LS833
FN4392	LS4392	ITC4017	LS132	ITE4393	LS4393	J502	LS845	LSIT121	LS121	LS840	LS840
FN4393	LS4393	ITC4018	LS132	ITE4416	LS5912	J503	LS845	LSIT122	LS122	LS841	LS841
FTO654A	LS5912	ITC4019	LS132	ITE4867	LS842	J504	LS845	LSIT130	LS130	LS842	LS842
FTO654B	LS5912	ITC4020	LS132	ITE4868	LS842	J505	LS845	LSIT130A	LS130A	LS843	LS843
FTO654C	LS845	ITC4021	LS132	ITE4869	LS842	J506	LS842	LSIT131	LS131	LS844	LS844
FTO654D	LS845	ITC4022	LS132	ITE500	LS845	J507	LS842	LSIT132	LS132	LS845	LS845
FTO704	LS3N163	ITC4023	LS312	ITE501	LS845	J508	LS842	LSJ210	LSJ210	LS846	LS846
GET5457	LS842	ITC4024	LS312	ITE502	LS845	J509	LS842	LSJ211	LSJ211	M163	LS3N163
GET5458	LS842	ITC4025	LS312	ITE503	LS845	J510	LS842	LSJ212	LSJ212	M164	LS3N164
GET5459	LS842	ITC4053	LS120	ITE504	LS845	J511	LS842	LSJ108	LSJ108	M440	LS5911
HA7807	LS132	ITE2639	LS120	ITE505	LS845	J552	LS842	LSJ109	LSJ109	M441	LS5911
HA7809	LS132	ITE2640	LS122	ITE506	LS842	J553	LS842	LSJ110	LSJ110	M5911	LS5911
HDIG1030	LS3N163	ITE2641	LS122	ITE507	LS842	J554	LS842	LSJ110	LSJ110	M5912	LS5912
ID100	LSID100	ITE2642	LS120	J108	LSJ108	J555	LS842	LS3N163	LS3N163	MAT01	LS312
ID101	LSID101	ITE2643	LS122	J109	LSJ109	J556	LS842	LS3N164	LS3N164	MAT02	LS318
IMF3954	LS3954	ITE2644	LS122	J110	LSJ110	J557	LS842	LS3N165	LS3N165	MAT03	LS358
IMF3954A	LS3954A	ITE2720	LS120	J110A	LSJ110A	J9100	LS842	LS3N166	LS3N166	MD1120	LS122
IMF3955	LS3955	ITE2721	LS122	J111	LS4391	JPAD10	LSJPAD10	LS3N170	LS3N170	MD1121	LS122
IMF3955A	LS3954	ITE2722	LS120	J111A	LS4391	JPAD100	LSJPAD100	LS3N171	LS3N171	MD1122	LS122
IMF3956	LS3956	ITE2903	LS122	J112	LS4392	JPAD200	LSJPAD200	LSU401	LSU401	MD1123	LS132
IMF3957	LS3955	ITE2913	LS122	J112A	LS4392	JPAD5	LSJPAD5	LSU402	LSU402	MD1129	LS122
IMF3958	LS3958	ITE2914	LS122	J113	LS4393	JPAD50	LSJPAD50	LSU403	LSU403	MD1130	LS132
IMF6485	LSU405	ITE2915	LS120	J113A	LS4393	JPAD500	LSJPAD500	LSU404	LSU404	MD2218	LS122
IT100	LS4393P	ITE2916	LS120	J1401	LS830	K210-18	LS5912	LSU405	LSU405	MD2219	LS122
IT101	LS4391P	ITE2917	LS122	J1401	LS844	K211-18	LS5912	LSU406	LSU406	MD2369	LS122
IT108	LS5912	ITE2918	LS122	J1402	LS844	K212-18	LS5912	LS421	LS421	MD2904	LS132
IT109	LS4391	ITE2919	LS120	J1402	LS832	K300-18	LS5912	LS422	LS422	MD2905	LS132
IT120	LS120	ITE2920	LS120	J1403	LS832	K304-18	LS5912	LS423	LS423	MD2974	LS120
IT120A	LS120A	ITE2936	LS120	J1403	LS844	K305-18	LS5912	LS424	LS424	MD2975	LS120
IT121	LS121	ITE2937	LS120	J1404	LS845	K308-18	LS4391	LS425	LS425	MD2978	LS120
IT122	LS122	ITE2972	LS122	J1404	LS832	K309-18	LS4391	LS426	LS426	MD2979	LS120
IT124	LS124	ITE2973	LS122	J1404	LSU404	K310-18	LS4391	LS301	LS301	MD3008	LS120
IT126	LS312	ITE2974	LS120	J1405	LSU405	KA3524	LS124	LS302	LS302	MD3250	LS132
IT127	LS312	ITE2975	LS120	J1405	LS832	KE3684	LS842	LS303	LS303	MD3251	LS132
IT128	LS312	ITE2976	LS120	J1406	LS845	KE3685	LS842	LS310	LS310	MD3409	LS122
IT129	LS311	ITE2977	LS120	J1406	LSU406	KE3686	LS842	LS311	LS311	MD3410	LS122
IT130	LS130	ITE2978	LS120	J1406	LS845	KE3687	LS842	LS312	LS312	MD3467	LS132
IT130A	LS130A	ITE2979	LS120	J1406	LS832	KE3823	LS5912	LS313	LS313	MD3725	LS122
IT131	LS131	ITE3066	LS842	J174	LS4391P	KE3970	LS4391	LS318	LS318	MD3762	LS132
IT132	LS132	ITE3067	LS842	J175	LS4392P	KE3971	LS4391	LS3250	LS3250	MD4957	LS132
IT136	LS352	ITE3068	LS842	J176	LS4393P	KE3972	LS4391	LS3250A	LS3250	MD5000	LS132
IT137	LS352	ITE3347	LS312	J177	LS4393P	KE4091	LS4391	LS3250B	LS3250	MD7000	LS122
IT138	LS351	ITE3348	LS312	J201	LS842	KE4092	LS4391	LS3250C	LS3250	MD7001	LS132
IT139	LS351	ITE3349	LS132	J202	LS842	KE4093	LS4391	LS350	LS350	MD7002	LS122
IT140	LS313	ITE3350	LS312	J203	LS842	KE4220	LS842	LS351	LS351	MD7003	LS132
IT1700	LS3N163	ITE3351	LS312	J204	LS842	KE4221	LS842	LS352	LS352	MD7004	LS122
IT1702	LS3N163	ITE3680	LS120	J210	LSJ210	KE4222	LS842	LS3550	LS3550	MD7007	LS122
IT500	LS844	ITE3800	LS132	J211	LSJ211	KE4223	LS5912	LS3550A	LS3550A	MD708	LS122
IT501	LS844	ITE3802	LS132	J212	LSJ212	KE4224	LS5912	LS3550B	LS3550B	MD8001	LS120

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MD8002	LS120	MP5912	LS5912	NPD5566	LS844	SL362	LS122	SST4857	LS4857	TD202	LS122
MD8003	LS122	MP5912C	LS5912	NPD8301	LS3954	SSM2220	LS358	SST4858	LS4858	TD2219	LS122
MD918	LS122	MP830	LS830	NPD8302	LS3955	SD210	SD210	SST4859	LS4859	TD224	LS122
MD982	LS132	MP831	LS831	NPD8303	LS3956	SD210DE	SD210DE	SST4860	LS4860	TD225	LS122
MD984	LS132	MP832	LS832	P1086	LS4393	SD211DE	SD211DE	SST4861	LS4861	TD226	LS122
MEF3954	LS3954	MP833	LS833	P1087	LS4393	SD211	SD211	SST5114	LS5114	TD227	LS122
MEF3955	LS3955	MP840	LS840	PAD1	LSPAD1	SD213	SD213	SST5115	LS5115	TD228	LS122
MEF3956	LS3956	MP841	LS841	PAD10	LSPAD10	SD213DE	SD211DE	SST5116	LS5116	TD229	LS122
MEF3957	LS841	MP842	LS842	PAD100	LSPAD100	SD214DE	SD214DE	SST5460	LS5460	TD230	LS122
MEF3958	LS3958	MP843	LS843	PAD2	LSPAD2	SD214	SD214	SST5461	LS5461	TD231	LS122
MEF5561	LS844	MP844	LS844	PAD20	LSPAD20	SD215DE	SD215DE	SST5462	LS5462	TD232	LS122
MEF5562	LS844	MP845	LS845	PAD5	LSPAD5	SD215	SD215	SST5463	LS5463	TD233	LS122
MEF5563	LS844	MPF102	LS5912	PAD50	LSPAD50	SD217	LS823	SST5464	LS5464	TD234	LS122
MEM520	LS3N164	MPF103	LS842	PF510	LS4391	SD219	LS824	SST5465	LS5465	TD235	LS122
MEM520C	LS3N164	MPF104	LS842	PN4091	LS4391	SD5000	SD5000	SST5484	LS5484	TD236	LS122
MEM561	LS3N163	MPF105	LS842	PN4092	LS4392	SD5000N	SD5000N	SST5485	LS5485	TD237	LS122
MEM561C	LS3N163	MPF106	LS5912	PN4093	LS4393	SD5001	SD5001	SST5486	LS5486	TD238	LS122
MEM806	LS3N163	MPF107	LS5912	PN4117	LS5905	SD5001N	SD5001N	SST5638	LS5638	TD239	LS122
MEM806A	LS3N163	MPF108	LS5912	PN4117A	LS5905	SD5000I	SD5000I	SST5639	LS5639	TD240	LS121
MFE2000	LS5912	MPF109	LS5912	PN4118	LS5905	SD5400	SD5400	SST5640	LS5640	TD241	LS121
MFE2001	LS5912	MPF111	LS5912	PN4118A	LS5905	SD5400CY	SD5400CY	SST5911	LS5911	TD242	LS120
MFE2004	LS4392	MPF112	LS5912	PN4119	LS5905	SD5401	SD5401	SST5912	LS5912	TD243	LS120
MFE2005	LS4392	MPF256	LS4391	PN4119A	LS5905	SD5401CY	SD5401CY	SST823	SST823	TD244	LS122
FE2006	LS4391	MPF4391	LS4391	PN4120	LS5905	SSTPAD5	LSPAD5	SST824	SST824	TD245	LS122
MFE2007	LS4391	MPF4392	LS4392	PN4120A	LS5905	SSTPAD10	LSPAD10	SU2020	LS3954	TD246	LS122
MFE2008	LS4393	MPF4393	LS4393	PN4302	LS842	SSTPAD20	LSPAD20	SU2021	LS3954	TD247	LS122
MFE2009	LS4393	MPF820	LS4391	PN4303	LS845	SSTPAD50	LSPAD50	SU2022	LS3954	TD248	LS122
MFE2010	LSJ110	MPF970	LS4391	PN4304	LS845	SSTPAD100	LSPAD100	SU2023	LS3954	TD250	LS120
MFE2011	LSJ108	MPF971	LS4393	PN4391	LS4391	SSTD PAD5	LSDPAD5	SU2024	LS3954	TD2905	LS122
MFE2012	LSJ108	ND5700	LS120	PN4392	LS4392	SSTD PAD10	LSDPAD10	SU2025	LS3954	TD400	LS132
MFE2093	LS842	ND5701	LS120	PN4393	LS4393	SSTD PAD20	LSDPAD20	SU2026	LS3954	TD401	LS132
MFE2094	LS842	ND5702	LS120	PN4416	LS5912	SSTD PAD50	LSDPAD50	SU2027	LS3954	TD402	LS132
MFE823	LS3N163	NDF9401	LS832	PN5163	LS5912	SSTD PAD100	LSDPAD100	SU2028	LS3954	TD500	LS132
MK10	LS5912	NDF9402	LS832	S04416	LS5912	SST108	LSJ108	SU2029	LS3954	TD501	LS132
MMBF310	LS4391	NDF9403	LS832	SA2253	LS122	SST109	LSJ108	SU2030	LS3954	TD502	LS132
MMBF4391	LS4391	NDF9404	LS832	SA2254	LS122	SST110	LSJ110	SU2031	LS3954	TD509	LS132
MMBF4392	LS4392	NDF9405	LS832	SA2255	LS122	SST111	LS111	SU2032	LS3954	TD510	LS132
MMBF4393	LS4393	NDF9406	LS832	SA2644	LS120	SST112	LS112	SU2033	LS3954	TD511	LS132
MMBF4416	LS5912	NDF9407	LS832	SA2648	LS120	SST113	LS113	SU2034	LS3955	TD512	LS132
MMBF4860	LS4391	NDF9408	LS832	SA2710	LS120	SST174	LS174	SU2035	LS3954	TD513	LS132
MMBF5310	LS4391	NDF9409	LS832	SA2711	LS120	SST175	LS175	SU2074	LS3954	TD514	LS132
MMBF5457	LS842	NDF9410	LS832	SA2712	LS121	SST176	LS176	SU2075	LS3954	TD517	LS132
MMBF5484	LS842	NF4445	LSJ108	SA2713	LS121	SST177	LS177	SU2076	LS3954	TD518	LS132
MMF1	LS844	NF4446	LSJ108	SA2714	LS122	SST201	LS201	SU2077	LS3954	TD519	LS132
MMF2	LS844	NF4447	LSJ108	SA2715	LS120	SST202	LS202	SU2078	LS425	TD520	LS132
MMF3	LS844	NF4448	LSJ108	SA2716	LS120	SST203	LS203	SU2079	LS425	TD521	LS132
MMF4	LS844	NF500	LS5912	SA2717	LS121	SST204	LS204	SU2080	LS845	TD522	LS132
MMF5	LS844	NF501	LS5912	SA2718	LS122	SST210	SST210	SU2081	LS845	TD523	LS132
MMF6	LS844	NF506	LS5912	SA2719	LS120	SST211	SST211	SU2098	LS841	TD524	LS132
MMT3823	LS842	NF510	LS4393	SA2720	LS121	SST213	SST213	SU2098A	LS840	TD525	LS132
MP301	LS301	NF511	LS4393	SA2721	LS122	SST214	SST214	SU2098B	LS841	TD526	LS132
MP302	LS302	NF520	LS842	SA2722	LS120	SST215	SST215	SU2099	LS841	TD527	LS131
MP303	LS303	NF521	LS842	SA2723	LS121	SST270	SST270	SU2099A	LS841	TD528	LS131
MP310	LS310	NF522	LS842	SA2724	LS122	SST271	SST271	SU2365	LSU401	TD5902	LS5906
MP311	LS311	NF523	LS842	SA2726	LS122	SST308	LSJ308	SU2365A	LSU401	TD5903	LS841
MP312	LS312	NF530	LS842	SA2727	LS122	SST309	LSJ309	SU2366	LSU402	TD5904	LS5908
MP313	LS313	NF531	LS842	SA2738	LS120	SST310	LSJ310	SU2366A	LSU402	TD5905	LS5905
MP318	LS318	NF532	LS842	SA2739	LS120	SST404	LSU404	SU2367	LSU403	TD5906	LS5906
MP350	LS350	NF533	LS842	SDF500	LS840	SST405	LSU405	SU2367A	LSU403	TD5907	LS841
MP351	LS351	NF5457	LS842	SDF501	LS840	SST406	LSU406	SU2368	LSU404	TD5908	LS5908
MP352	LS352	NF5458	LS842	SDF502	LS840	SST410	LS410	SU2368A	LSU404	TD5909	LS5909
MP358	LS358	NF5459	LS842	SDF503	LS840	SST411	LS411	SU2369	LSU405	TD5911	LS5911
MP360	LS350	NF5484	LS5912	SDF504	LS840	SST412	LS412	SU2369A	LSU405	TD5911A	LS5911
MP361	LS351	NF5485	LS5912	SDF505	LS840	SST4117	LS4117	SU2410	LS424	TD5912	LS5912
MP362	LS352	NF5486	LS5912	SDF506	LS840	SST4118	LS4118	SU2411	LS425	TD5912A	LS5912
MP3954	LS3954	NF5638	LS4391	SDF507	LS840	SST4119	LS4119	SU2412	LS426	TD700	LS122
MP3954A	LS3954A	NF5639	LS4392	SDF509	LS840	SST4091	LS4091	SU2652	LS844	TD701	LS122
MP3955	LS3955	NF5640	LS4393	SDF510	LS3954	SST4092	LS4092	SU2653	LS844	TD709	LS122
MP3956	LS3956	NF580	LSJ108	SDF512	LS3954	SST4093	LS4093	SU2654	LS844	TD710	LS122
MP3958	LS3958	NF581	LSJ108	SDF513	LS3954	SST4391	LS4391	SU2655	LS844	TD711	LS122
MP5905	LS5905	NF582	LSJ108	SDF514	LS3954	SST4392	LS4392	SU2656	LS845	TD713	LS122
MP5906	LS5906	NF583	LSJ110	SDF661	LS122	SST4393	LS4393	TD100	LS122	TIS14	LS842
MP5907	LS5907	NF584	LSJ108	SDF662	LS122	SST440	LS5911	TD101	LS122	TIS25	LS842
MP5908	LS5908	NF585	LS4393	SDF663	LS122	SST441	LS5911	TD102	LS122	TIS26	LS842
MP5909	LS5909	NPD5564	LS844	SL301	LS122	SST4416	LS4416	TD200	LS122	TIS27	LS842
MP5911	LS5911	NPD5565	LS844	SL360	LS122	SST4856	LS4856	TD201	LS122	TIS41	LS4393

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Industry #	LIS #	Industry #	LIS #	Industry #	LIS #
TIS58	LS5912	U250	LS5908	UC2134	LS3956
TIS68	LS3955	U250A	LS5908	UC2136	LS3955
TIS69	LS3955	U251	LS5905	UC2138	LS3958
TIS70	LS3956	U251A	LS5909	UC2139	LS3958
TIS73	LS4391	U252	LS5911	UC2147	LS3958
TIS74	LS4392	U253	LS5912	UC2148	LS3958
TIS75	LS4393	U254	LS4393	UC2149	LS3958
TIS88	LS5912	U256	LS4391	UC220	LS842
TIXS41	LS842	U257	LS4391	UC240	LS842
TIXS42	LS5905	U273	LS5906	UC241	LS842
TN4117	LS5905	U273A	LS5906	UC250	LS4391
TN4117A	LS5905	U274	LS5906	UC251	LS4392
TN4118	LS5905	U274A	LS5906	UC401	LS4393
TN4118A	LS5905	U275	LS5906	UC450	LS4391
TN4119	LS5905	U275A	LS5906	UC451	LS4393
TN4119A	LS5905	U280	LS842	UC703	LS845
TN4338	LS842	U281	LS842	UC704	LS845
TN4339	LS842	U282	LS842	UC705	LS5912
TN4340	LS842	U283	LS842	UC707	LS4391
TN4341	LS842	U284	LS842	UC714	LS842
TN5114	LS4391	U285	LS842	UC714E	LS842
TP5115	LS4392	U300	LS4391	UC734	LS5912
TP5116	LS4393	U3000	LS842	UC734E	LS5912
U1177	LS845	U3001	LS842	UC751	LS842
U1178	LS842	U3002	LS842	UC752	LS842
U1179	LS842	U301	LS4392	UC753	LS842
U1180	LS845	U3011	LS842	UC754	LS842
U1181	LS845	U3012	LS842	UC755	LS842
U1182	LS842	U304	LS4391	UC756	LS842
U1277	LS842	U305	LS4392	UC807	LS4391
U1278	LS842	U306	LS4393	UX2910	LS312
U1279	LS842	U308	LS4391	VCR11N	LSVCR11N
U1280	LS842	U309	LS4391	VCR12N	LS3958
U1281	LS842	U310	LS4391	VCR13N	LS3958
U1282	LS842	U311	LS4392	VCR2N	LS4392
U1283	LS842	U320	LSJ108	VCR3P	LS4391
U1284	LS842	U321	LSJ110	VCR4N	LS842
U1285	LS845	U322	LSJ108	VCR6P	LS4391
U1287	LS4392	U350	LS4391	VCR7N	LS832
U1288	LS842	U401	LSU401	VFW40	LS122
U1322	LS845	U402	LSU402	WK5457	LS842
U1323	LS845	U403	LSU403	WK5458	LS842
U1324	LS845	U404	LSU404	WK5459	LS842
U1325	LS845	U405	LSU405	ZDT40	LS122
U1420	LS842	U406	LSU406	ZDT41	LS312
U1421	LS842	U410	LS841	ZDT42	LS312
U1422	LS842	U411	LS841	ZDT44	LS312
U1714	LS842	U412	LS842	ZDT45	LS312
U182	LS4392	U421	LS421		
U183	LS842	U422	LS422		
U1897	LS4391	U423	LS423		
U1898	LS4392	U424	LS424		
U1899	LS4393	U425	LS425		
U197	LS842	U426	LS426		
U198	LS842	U427	LS832		
U199	LS842	U428	LS833		
U200	LS4393	U430	LS4391		
U201	LS4392	U431	LS4391		
U202	LS4391	U440	LS5911		
U2074E	LS5912	U441	LS5912		
U221	LS4391	U443	LS5911		
U222	LS4391	U444	LS5912		
U231	LS842	U508	LS5905		
U231	LS842	UC100	LS842		
U232	LS842	UC110	LS842		
U233	LS842	UC115	LS842		
U234	LS842	UC130	LS842		
U235	LS842	UC155	LS5912		
U240	LSJ108	UC1700	LS3N163		
U241	LSJ108	UC1764	LS3N163		
U242	LSJ108	UC20	LS842		
U243	LSJ108	UC200	LS842		
U248	LS5906	UC201	LS842		
U248A	LS5906	UC210	LS5912		
U249	LS5907	UC2130	LS840		
U249A	LS5907	UC2132	LS3955		

*Linear Integrated Systems, Inc.*

4042 Clipper Court

Fremont, CA 94538

USA

800 359 4023

510 490 9160

Fax: 510 353 0261

[www.linearsystems.com](http://www.linearsystems.com)

[sales@linearsystems.com](mailto:sales@linearsystems.com)