LINEAR SYSTEMS

Linear Integrated Systems

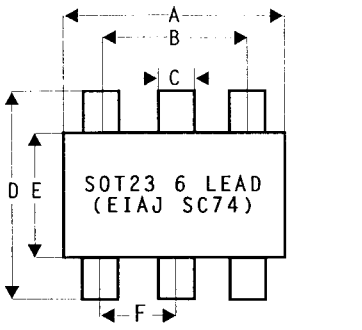
LS3250A, LS3250B, LS3250C
SOT- 6 LEAD SURFACE MOUNT MONOLITHIC DUAL NPN TRANSISTORS

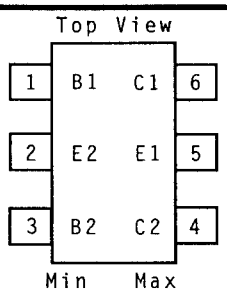
FEATURES

- 6 lead Surface Mount Package
- Tight Matching - .5 mV Typ. / 2 mV Max. (LS3250A)
- Monolithic Dual - Excellent Thermal tracking
- Special Screening is Available
- For Log Conformance version use LS3259
- For PNP Complement use LS3550A,LS3550B,LS3550C
- For PNP Log Conformance Version use LS3559

ABSOLUTE MAXIMUM RATINGS (NOTE: 1)

Collector Current	150mA
Storage Temperature	-55 to +150 C
Operating Junction Temperature	+150 C
Device Dissipation at Free Air	TBD
Linear Derating Factor	TBD





	Min	Max
A=	2.80	3.00
B=	1.90 Ref	
C=	0.35	0.50
D=	2.60	3.00
E=	1.50	1.75
F=	0.95 Ref	
G=	0.00	0.15
H=	0.90	1.45
I=	0.90	1.30
J=	0.35	0.55

Mils

SYMBOL	CHARACTERISTICS	3250A	3250B	3250C		UNITS	CONDITIONS
|VBE1-VBE2|	Base Emitter Voltage Differential	2	5	10	MAX	mV	IC= 10mA, VCE= 5V
|VBE1-VBE2|/C	Base Emitter Voltage Differential Change with Temperature	3	5	15	MAX	uV/C	IC= 10mA, VCE= 5V TA= -40 to +85 C
|IB1-IB2|	Base Current Differential	10	10	10	MAX	nA	IC= 10uA, VCE= 5V
|IB1-IB2|/C	Base Current Differential Change with Temperature	.5	.5	1	MAX	nA/C	IC= 10uA, VCE= 5V TA= -40 to +85 C
|hfe1-hfe2|	Current Gain Differential	10	10	15	MAX	%	IC= 10uA, VCE= 5V
BVCBO	Collector to Base Voltage	45	40	20	MIN	V	IC= 10mA, IE= 0
BVCEO	Collector to Emitter Voltage	45	40	20	MIN	V	IC= 10uA, IB= 0
BVEBO	Emitter to Base Voltage	6.2	6.2	6.2	MIN	V	IE= 10uA, IC= 0 (Note 2)
BVCCO	Collector to Collector Voltage	80	80	80	MIN	V	IC= 10uA, IE= 0
hFE	DC Current Gain	150	100	50	MIN		IC= 1mA, VCE= 5V
hFE	DC Current Gain	120	80	40	MIN		IC= 10mA, VCE= 5V
hFE	DC Current Gain	100	80	40	MIN		IC= 100mA, VCE= 10V
VCE(SAT)	Collector Saturation Voltage	.25	.25	1.2	MAX	V	IC= 100mA, IB= 10mA
ICBO	Collector Cutoff Current	.2	.2	.2	MAX	nA	IE= 0, VCB= (Note 3)
IEBO	Emitter Cutoff Current	.2	.2	.2	MAX	nA	IE= 0, VCB= 3V
COBO	Output Capacitance	2	2	2	MAX	pF	IE= 0, VCB= 10V
Ic1c2	Collector to Collector Leakage Current	1	1	1	MAX	nA	Vcc= +/- 80V
fT	Current Gain Bandwidth Product	600	600	600	MIN	MHz	Ic= 1mA, VCE= 5V
NF	Narrow Band Noise Figure	3	3	3	MAX	dB	Ic= 100uA, VCE= 5V BW=200Hz, RG=10 ohms f=1KHZ

NOTES:

1. These ratings are limiting values above which the serviceability of any semiconductor may be impaired.
2. The reverse base to emitter voltage must never exceed 6.2 volts; the reverse base to emitter current must never exceed 10uA.
3. For LS3250C: VCB= 20V; for LS3250B and LS3250A: VCB= 30V

3/97

Linear Integrated Systems 4042 Clipper Court, CA 94538 TEL: (510)490-9160, FAX: (510)353-0261