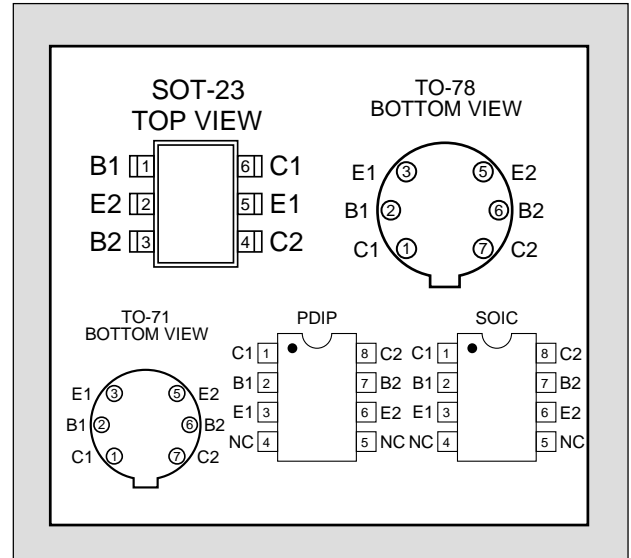


# LS3550 SERIES

## MONOLITHIC DUAL PNP TRANSISTORS

FEATURES	
6 LEAD SOT-23 SURFACE MOUNT PACKAGE*	
TIGHT MATCHING <sup>1</sup>	2mV
EXCELLENT THERMAL TRACKING <sup>1</sup>	3 $\mu$ V/ $^{\circ}$ C
ABSOLUTE MAXIMUM RATINGS <sup>2</sup>	
@ 25 $^{\circ}$ C (unless otherwise stated)	
Maximum Temperatures	
Storage Temperature	-65 to +150 $^{\circ}$ C
Operating Junction Temperature	-55 to +150 $^{\circ}$ C
Maximum Power Dissipation	
Continuous Power Dissipation	TBD
Maximum Currents	
Collector Current	50mA
Maximum Voltages	
Collector to Collector Voltage	80V



### MATCHING ELECTRICAL CHARACTERISTICS @25 $^{\circ}$ C (unless otherwise stated)

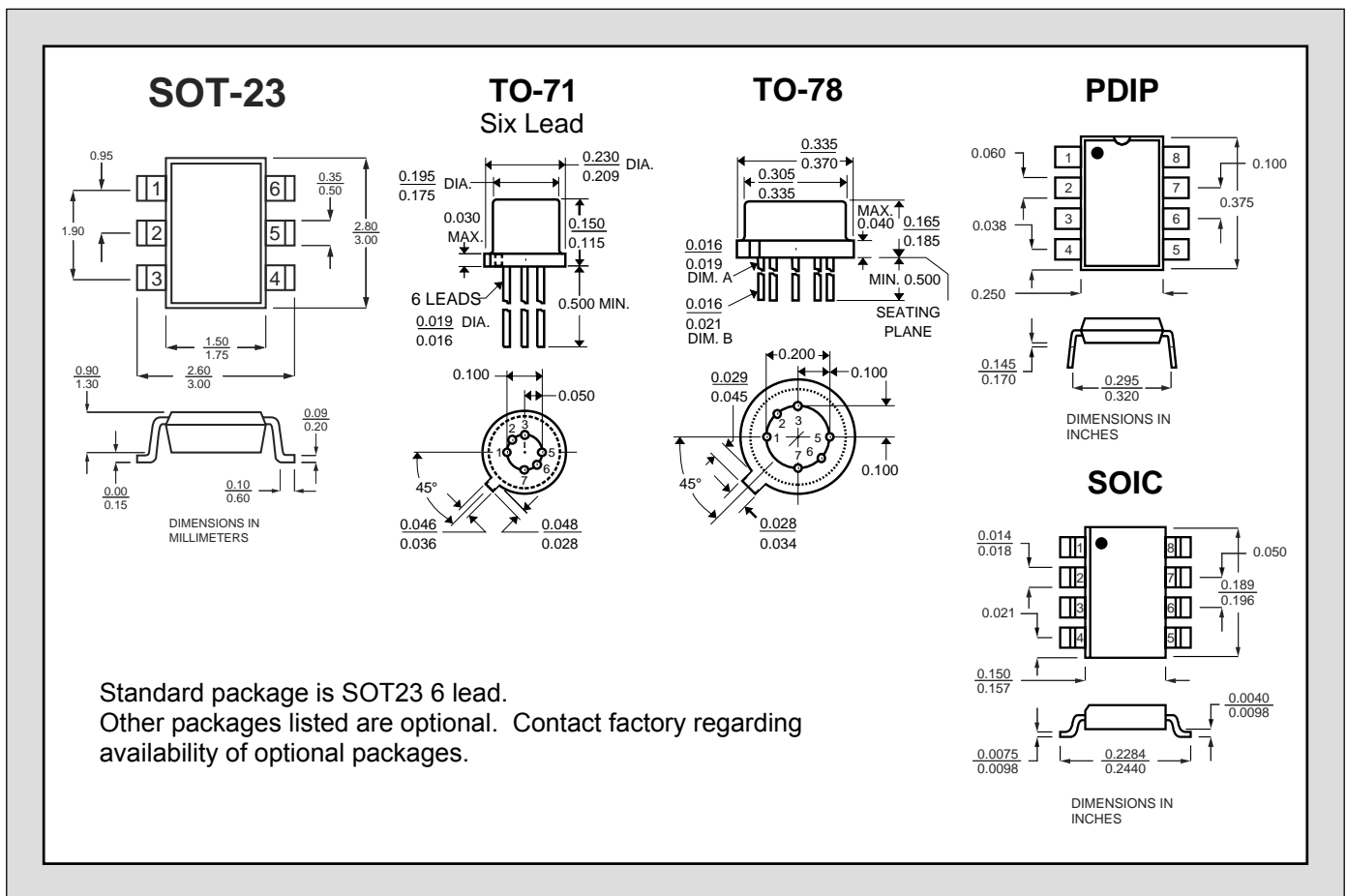
	CHARACTERISTIC	LS3250A						UNIT	CONDITIONS
		MIN	MAX	MIN	MAX	MIN	MAX		
	$ V_{BE1} - V_{BE2} $		2		5		10	mV	$I_C = -10\text{mA}$ , $V_{CE} = -5\text{V}$
	$\frac{ V_{BE1} - V_{BE2} }{\Delta T}$		3		5		15	$\mu\text{V}/^{\circ}\text{C}$	$I_C = -10\text{mA}$ , $V_{CE} = -5\text{V}$ $T_A = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$
	$ I_{B1} - I_{B2} $		10		10		10	nA	$I_C = -10\mu\text{A}$ , $V_{CE} = -5\text{V}$
	$\frac{ I_{B1} - I_{B2} }{\Delta T}$		0.5		0.5		1.0	nA/ $^{\circ}\text{C}$	$I_C = -10\mu\text{A}$ , $V_{CE} = -5\text{V}$ $T_A = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$
	$\frac{h_{FE1}}{h_{FE2}}$		10		10		15	%	$I_C = -10\mu\text{A}$ , $V_{CE} = -5\text{V}$

### ELECTRICAL CHARACTERISTICS @25 $^{\circ}$ C (unless otherwise stated)

SYMBOL	CHARACTERISTIC	LS3250A		LS3250B		LS3250C		UNIT	CONDITIONS
		MIN	MAX	MIN	MAX	MIN	MAX		
$BV_{CBO}$	Collector to Base Breakdown Voltage	-45		-40		-20		V	$I_C = -10\text{mA}$ , $I_E = 0\text{A}$
$BV_{CEO}$	Collector to Emitter Breakdown Voltage	-45		-40		-20			$I_C = -10\mu\text{A}$ , $I_E = 0\text{A}$
$BV_{CCO}$	Collector to Collector Breakdown Voltage	-80		-80		-80			$I_E = -10\mu\text{A}$ , $I_C = 0\text{A}$
$BV_{EBO}$	Emitter to Base Breakdown Voltage <sup>3</sup>	-6.2		-6.2		-6.2			$I_C = -100\text{mA}$ $I_B = -10\text{mA}$
$V_{CE(SAT)}$	Collector to Emitter Saturation Voltage		-0.25		-0.25		-1.2		

**ELECTRICAL CHARACTERISTICS CONT. @25 °C (unless otherwise stated)**

SYMBOL	CHARACTERISTIC	LS3250A		LS3250B		LS3250C		UNIT	CONDITIONS
		MIN	MAX	MIN	MAX	MIN	MAX		
$h_{FE}$	DC Current Gain	150		100		50			$I_C = -1mA, V_{CE} = -5V$
		120		80		40			$I_C = -10mA, V_{CE} = -5V$
		100		80		40			$I_C = -100mA, V_{CE} = -5V$
$I_{CBO}$	Collector Cutoff Current		-0.2		-0.2			nA	$I_E = 0A, V_{CB} = -30V$
						-0.2			$I_E = 0A, V_{CB} = -20V$
$I_{EBO}$	Emitter Cutoff Current		-0.2		-0.2		-0.2		$I_E = 0A, V_{CB} = -3V$
$I_{C1C2}$	Collector to Collector Leakage Current		-1		-1		-1		$V_{CC} = \pm 80V$
$C_{OBO}$	Output Capacitance		2		2		2	pF	$I_E = 0A, V_{CB} = -10V$
$f_T$	Gain Bandwidth Product (Current)		600		600		600	MHz	$I_C = -1mA, V_{CE} = -5V$
NF	Noise Figure (Narrow Band)		3		3		3	dB	$I_C = -100\mu A, V_{CE} = -5V$ $BW = 200Hz$ $R_B = 10\Omega, f = 1kHz$



**NOTES:**

1. Maximum rating for LS3550A, SOT23-6.
2. Absolute maximum ratings are limiting values above which serviceability may be impaired.
3. The reverse Base to Emitter voltage must never exceed -6.2 Volts. The reverse Base to Emitter current must never exceed -10 $\mu$ A.

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