

Linear Systems NPN Transistor

The LS3250SA is a NPN transistor mounted in a single SOT-23 package.

The 3 Pin SOT-23 provides ease of manufacturing.

(See Packaging Information).

LS3250SA Features:

- Low Output Capacitance

FEATURES	
LOW OUTPUT CAPACITANCE	≤ 2pF
ABSOLUTE MAXIMUM RATINGS ¹ @ 25°C (unless otherwise noted)	
Maximum Temperatures	
Storage Temperature	-65°C to +150°C
Operating Junction Temperature	-55°C to +150°C
Maximum Power Dissipation	
Continuous Power Dissipation	TBD
Maximum Currents	
Collector Current	50mA
Maximum Voltages	
Collector to Collector Voltage	80V

ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

SYMBOL	CHARACTERISTICS	MIN.	TYP.	MAX.	UNITS	CONDITIONS
V_{CB0}	Collector to Base Voltage	45	--	--	V	$I_C = 10\text{mA}, I_E = 0$
V_{CE0}	Collector to Emitter Voltage	45	--	--	V	$I_C = 10\mu\text{A}, I_B = 0$
V_{EBO} ²	Emitter-Base Breakdown Voltage	6.2	--	--	V	$I_E = 10\mu\text{A}, I_C = 0$
V_{CC0}	Collector to Collector Voltage	80	--	--	V	$I_C = 10\mu\text{A}, I_E = 0$
h_{FE}	DC Current Gain	150	--	--		$I_C = 10\mu\text{A}, V_{CE} = 5\text{V}$
		120	--	--		$I_C = 100\mu\text{A}, V_{CE} = 5\text{V}$
		100	--	--		$I_C = 1\text{mA}, V_{CE} = 5\text{V}$
$V_{CE(SAT)}$	Collector Saturation Voltage	--	--	0.25	V	$I_C = 100\text{mA}, I_B = 10\text{mA}$
I_{EBO}	Emitter Cutoff Current	--	--	0.2	nA	$I_C = 0\text{A}, V_{CB} = 3\text{V}$
I_{CBO}	Collector Cutoff Current	--	--	0.2	nA	$I_E = 0\text{A}, V_{CB} = 20\text{V}$
C_{OBO}	Output Capacitance	--	--	2	pF	$I_E = 0\text{A}, V_{CB} = 10\text{V}$
f_T	Current Gain Bandwidth Product	--	--	600	MHZ	$I_C = 1\text{mA}, V_{CE} = 5\text{V}$
NF	Narrow Band Noise Figure	--	--	3	dB	$I_C = 100\mu\text{A}, V_{CE} = 5\text{V}, BW = 200\text{Hz}, R_B = 10\Omega, f = 1\text{KHz}$

- Notes:
- Absolute Maximum ratings are limiting values above which serviceability may be impaired
 - The reverse base-to-emitter voltage must never exceed 6.2 volts; the reverse base-to-emitter current must never exceed 10µA.



Available Packages:

LS3250SA in SOT-23
LS3250SA available as bare die

Please contact Micross for full package and die dimensions:

Email: chipcomponents@micross.com
Web: www.micross.com/distribution.aspx

