

Linear Systems NPN Transistor

The LS3250SB is a NPN transistor mounted in a single SOT-23 package.

The 3 Pin SOT-23 provides ease of manufacturing, and a lower cost assembly option.

(See Packaging Information).

- Low Output Capacitance

FEATURES

LOW 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	40	--	--	V	$I_C = 10mA, I_E = 0$
V_{CE0}	Collector to Emitter Voltage	40	--	--	V	$I_C = 10\mu A, I_B = 0$
V_{EBO} ²	Emitter-Base Breakdown Voltage	6.2	--	--	V	$I_E = 10\mu A, I_C = 0$
h_{FE}	DC Current Gain	100	--	--		$I_C = 10\mu A, V_{CE} = 5V$
		80	--	--		$I_C = 100\mu A, V_{CE} = 5V$
		80	--	--		$I_C = 1mA, V_{CE} = 5V$
$V_{CE(SAT)}$	Collector Saturation Voltage	--		0.25	V	$I_C = 100mA, I_B = 10mA$
I_{EBO}	Emitter Cutoff Current	--		0.2	nA	$I_C = 0A, V_{CB} = 3V$
I_{CBO}	Collector Cutoff Current	--		0.2	nA	$I_E = 0A, V_{CB} = 20V$
C_{OBO}	Output Capacitance	--		2	pF	$I_E = 0A, V_{CB} = 10V$
f_T	Current Gain Bandwidth Product	--		600	MHz	$I_C = 1mA, V_{CE} = 5V$
NF	Narrow Band Noise Figure	--		3	dB	$I_C = 100\mu A, V_{CE} = 5V, BW = 200Hz, R_B = 10\Omega, f = 1KHz$

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:

LS3250SB in SOT-23
LS3250SB available as bare die

Please contact Micross for full package and die dimensions:

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

