

## Linear Systems NPN Transistor

The LS3250SC is a NPN transistor mounted in a single TO-92 package.

The 3 Pin TO-92 provides ease of manufacturing, and the symmetrical pinout prevents improper orientation.

(See Packaging Information).

- Low Output Capacitance

### FEATURES

LOW CAPACITANCE

≤ 2pF

**ABSOLUTE MAXIMUM RATINGS**<sup>1</sup>  
@ 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
$BV_{CBO}$	Collector to Base Voltage	20	--	--	V	$I_C = 10mA, I_E = 0$
$BV_{CEO}$	Collector to Emitter Voltage	20	--	--	V	$I_C = 10\mu A, I_B = 0$
$BV_{EBO}$ <sup>2</sup>	Emitter-Base Breakdown Voltage	6.2	--	--	V	$I_E = 10\mu A, I_C = 0$
$h_{FE}$	DC Current Gain	50	--	--		$I_C = 10\mu A, V_{CE} = 5V$
		40	--	--		$I_C = 100\mu A, V_{CE} = 5V$
		40	--	--		$I_C = 1mA, V_{CE} = 5V$
$V_{CE(SAT)}$	Collector Saturation Voltage	--	--	1.2	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:

LS3250SC in TO-92  
LS3250SC available as bare die

Please contact Micross for full package and die dimensions:

Email: [chipcomponents@micross.com](mailto:chipcomponents@micross.com)  
Web: [www.micross.com/distribution.aspx](http://www.micross.com/distribution.aspx)

TO-92 (Bottom View)

