

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 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	20	--	--	V	$I_C = 10\text{mA}, I_E = 0$
V_{CE0}	Collector to Emitter Voltage	20	--	--	V	$I_C = 10\mu\text{A}, I_B = 0$
V_{EBO} ²	Emitter-Base Breakdown Voltage	6.2	--	--	V	$I_E = 10\mu\text{A}, I_C = 0$
h_{FE}	DC Current Gain	50	--	--		$I_C = 10\mu\text{A}, V_{CE} = 5\text{V}$
		40	--	--		$I_C = 100\mu\text{A}, V_{CE} = 5\text{V}$
		40	--	--		$I_C = 1\text{mA}, V_{CE} = 5\text{V}$
$V_{CE(SAT)}$	Collector Saturation Voltage	--		1.2	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	$I_C = 100\mu\text{A}, V_{CE} = 5\text{V}, \text{BW} = 200\text{Hz}, R_B = 10\Omega, f = 1\text{KHz}$

- 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.



TO-92 (Bottom View)

Available Packages:

LS3250SC in TO-92
LS3250SC available as bare die

Please contact Micross for full package and die dimensions:

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

