# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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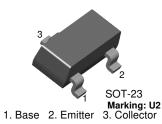


January 2005



## **BCX20** NPN Epitaxial Silicon Transistor

## **Switching and Amplifier Applications**

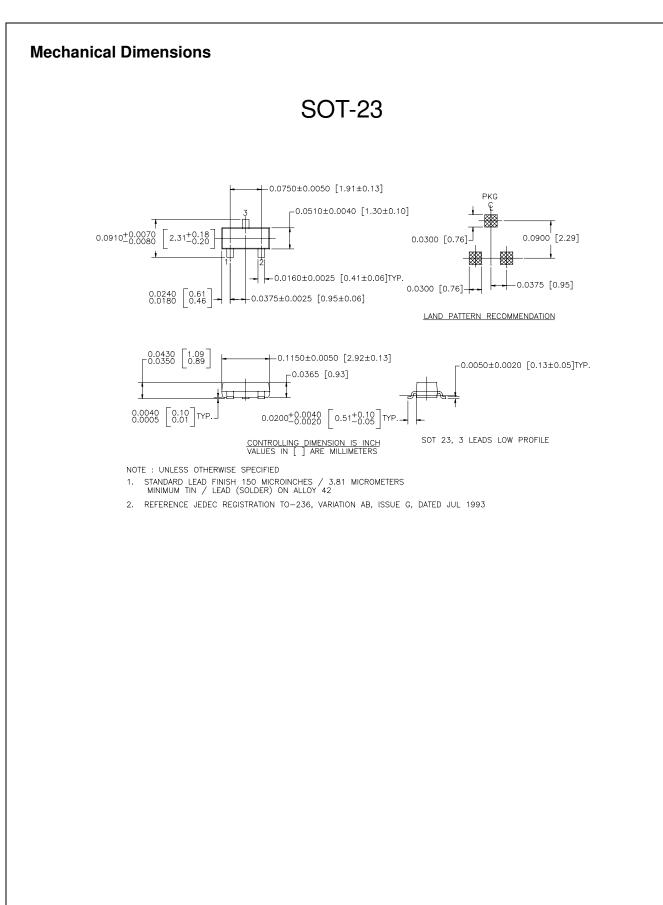


## Absolute Maximum Ratings $T_a = 25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CES</sub>	Collector-Emitter Voltage	30	V
V <sub>CEO</sub>	Collector-Emitter Voltage	25	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current (DC)	800	A
P <sub>C</sub>	Collector Dissipation	310	W
TJ	Junction Temperature	150	٥C
T <sub>STG</sub>	Storage Temperature	-65 ~ 150	°C

### Electrical Characteristics T<sub>C</sub> = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA, I <sub>B</sub> = 0	25		V
BV <sub>CES</sub>	Collector-Emitter Breakdown Voltage	$I_{C} = 100 \mu A, V_{BE} = 0$	30		V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	$I_{E} = 10\mu A, I_{C} = 0$	5		V
I <sub>CBO</sub>	Collector Cut-off Current	$V_{CE} = 20V, V_{BE} = 0$		100	nA
I <sub>EBO</sub>	Emitter-Base Cut-off Current	$V_{BE} = 5V, I_{C} = 0$		10	nA
h <sub>FE1</sub> h <sub>FE2</sub> h <sub>FE3</sub>	DC Current Gain	$V_{CE} = 1V, I_{C} = 100mA$ $V_{CE} = 1V, I_{C} = 300mA$ $V_{CE} = 1V, I_{C} = 500mA$	100 70 40	600	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	$I_{\rm C} = 500 {\rm mA}, I_{\rm B} = 50 {\rm mA}$		0.62	V
V <sub>BE(on)</sub>	Base-Emitter Saturation Voltage	V <sub>CE</sub> = 1A, I <sub>B</sub> = 500mA		1.2	V



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FACT Quiet Series <sup>™</sup>		OCXPro™	RapidConnect™	UHC™
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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