

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!



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SOT89 PNP SILICON PLANAR MEDIUM POWER TRANSISTORS

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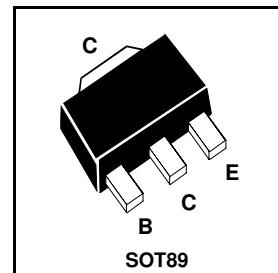
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BCX51
BCX52
BCX53

COMPLEMENTARY TYPE – BCX51 – BCX54
BCX52 – BCX55
BCX53 – BCX56

PARTMARKING DETAILS –

BCX51 – AA	BCX52 – AE	BCX53 – AH
BCX51-10-AC	BCX52-10-AG	BCX53-10-AK
BCX51-16-AD	BCX52-16-AM	BCX53-16-AL



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	BCX51	BCX52	BCX53	UNIT
Collector-Base Voltage	V_{CBO}	-45	-60	-100	V
Collector-Emitter Voltage	V_{CEO}	-45	-60	-80	V
Emitter-Base Voltage	V_{EBO}			-5	V
Peak Pulse Current	I_{CM}			-1.5	A
Continuous Collector Current	I_C			-1	A
Power Dissipation at $T_{amb}=25^\circ C$	P_{tot}			1	W
Operating and Storage Temperature Range	$T_j:T_{stg}$			-65 to +150	°C

ELECTRICAL CHARACTERISTICS (at $T_{amb}=25^\circ C$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	Typ.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-100			V	$I_C = -100\mu A$
BCX52		-60			V	$I_C = -100\mu A$
BCX51		-45			V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-80			V	$I_C = -10mA^*$
BCX53		-60			V	$I_C = -10mA^*$
BCX52		-45			V	$I_C = -10mA^*$
BCX51						
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	$I_E = -10\mu A$
Collector Cut-Off Current	I_{CBO}			-0.1	μA	$V_{CB} = -30V$
				-20	μA	$V_{CB} = -30V, T_{amb} = 150^\circ C$
Emitter Cut-Off Current	I_{EBO}			-20	nA	$V_{EB} = -4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.5	V	$I_C = -500mA, I_B = -50mA^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$			-1.0	V	$I_C = -500mA, V_{CE} = -2V^*$
Static Forward Current Transfer Ratio	h_{FE}	25 40 25 -10 -16		250 160 250		$I_C = -5mA, V_{CE} = -2V^*$ $I_C = -150mA, V_{CE} = -2V^*$ $I_C = -500mA, V_{CE} = -2V^*$ $I_C = -150mA, V_{CE} = -2V^*$ $I_C = -150mA, V_{CE} = -2V^*$
Transition Frequency	f_T	150			MHz	$I_C = -50mA, V_{CE} = -10V, f = 100MHz$
Output Capacitance	C_{obo}			25	pF	$V_{CB} = -10V, f = 1MHz$

* Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤2%