

SOT89 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 3 – FEBRUARY 1996



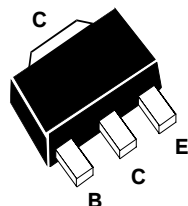
BST16

FEATURES

- * High V_{CEO}
- * Low saturation voltage

COMPLEMENTARY TYPE – BST39

PARTMARKING DETAIL – BT2



SOT89

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-350	V
Collector-Emitter Voltage	V_{CEO}	-300	V
Emitter-Base Voltage	V_{EBO}	-4	V
Peak Pulse Current	I_{CM}	-1	A
Continuous Collector Current	I_C	-500	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	1	W
Operating and Storage Temperature Range	T_j, T_{stg}	-65 to +150	$^{\circ}C$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-350			V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300			V	$I_C = -1mA$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-4			V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}			-1	μA	$V_{CB} = -280V$
Collector Cut-Off Current	I_{CEO}			-50	μA	$V_{CB} = -250V$
Emitter Cut-Off Current	I_{EBO}			-20	μA	$V_{EB} = -4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			- 2.0 -0.5	V V	$I_C = -50mA, I_B = -5mA^*$ $I_C = -30mA, I_B = -3mA^*$
Static Forward Current Transfer Ratio	h_{FE}	30		150		$I_C = -50mA, V_{CE} = -10V^*$
Transition Frequency	f_T	15			MHz	$I_C = -10mA, V_{CE} = -10V^*$ $f = 30MHz$
Output Capacitance	C_{obo}			15	pF	$V_{CB} = -10V, f = 1MHz$

* Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$
For typical characteristics graphs see FMMTA92 datasheet.