

# SOT89 PNP SILICON PLANAR DARLINGTON TRANSISTOR

## BST62-70

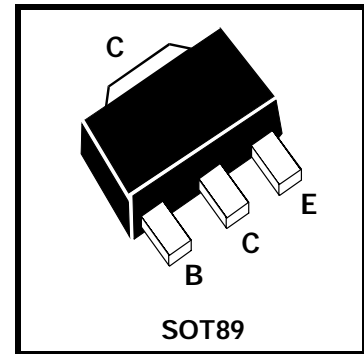
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### FEATURES

- \* Fast Switching
- \* High  $h_{FE}$

PARTMAKING DETAIL — 627



### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	-85	V
Collector-Emitter Voltage	$V_{CEO}$	-72	V
Emitter-Base Voltage	$V_{EBO}$	-10	V
Pea Pulse Current	$I_{CM}$	-1.5	A
Continuous Collector Current	$I_C$	-500	mA
Base Current	$I_B$	-100	mA
Power Dissipation at $T_{amb}=25^\circ\text{C}$	$P_{tot}$	1	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-65 to +150	$^\circ\text{C}$

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

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-85		V	$I_C = -10\mu\text{A}, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-72		V	$I_C = -10\text{mA}, I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-10		V	$I_E = -10\mu\text{A}, I_C = 0$
Emitter Cut-Off Current	$I_{EBO}$		-10	$\mu\text{A}$	$V_{EB} = -8\text{V}, I_E = 0$
Collector-Emitter Cut-Off Current	$I_{CES}$		-10	$\mu\text{A}$	$V_{CE} = -72\text{V}, I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-1.3 -1.3	V V	$I_C = -500\text{mA}, I_B = -0.5\text{mA}$ $I_C = -500\text{mA}, I_B = -0.5\text{mA}$ $T_j = 150^\circ\text{C}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-1.9	V	$I_C = -500\text{mA}, I_B = -0.5\text{mA}$
Static Forward Current Transfer Ratio	$h_{FE}$	1K 2K			$I_C = -150\text{mA}, V_{CE} = -10\text{V}^*$ $I_C = -500\text{mA}, V_{CE} = -10\text{V}^*$
Turn On Time	$t_{on}$		400 Typical	ns	$I_C = -500\text{mA}$ $I_{Bon} = I_{Boff} = -0.5\text{mA}$
Turn Off Time	$t_{off}$		1.5K Typical	ns	

\* Measured under pulsed conditions. Pulse width=300 $\mu\text{s}$ . Duty cycle  $\leq 2\%$   
For typical characteristics graphs see FZTA63 (SOT223) datasheet.