

SOT89 PNP SILICON DARLINGTON TRANSISTOR

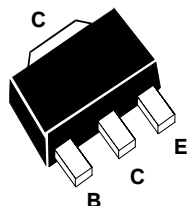
ISSUE 3 – SEPTEMBER 1995



BCV28

COMPLEMENTARY TYPE – BCV29

PARTMARKING DETAIL – ED



SOT89

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-30	V
Emitter-Base Voltage	V_{EBO}	-10	V
Peak Pulse Current	I_{CM}	-800	mA
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	$V_{(BR)CBO}$	-40			V	$I_C=100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-30			V	$I_C=10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-10			V	$I_E=10\mu A$
Collector Cut-Off Current	I_{CBO}			-100 -10	nA μA	$V_{CB}=-30V$ $V_{CB}=-30V, T_{amb}=150^{\circ}C$
Emitter Cut-Off Current	I_{EBO}			-100	nA	$V_{EB}=-4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-1	V	$I_C=-100mA, I_B=-0.1mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-1.5	V	$I_C=-100mA, I_B=-0.1mA^*$
Static Forward Current Transfer Ratio	h_{FE}	4000 10000 20000 4000				$I_C=-100\mu A, V_{CE}=-1V^{\dagger}$ $I_C=-10mA, V_{CE}=-5V^*$ $I_C=-100mA, V_{CE}=-5V^*$ $I_C=-0.5mA, V_{CE}=-5V^*$
Transition Frequency	f_T		200		MHz	$I_C=-50mA, V_{CE}=-5V$ $f = 20MHz$
Output Capacitance	C_{obo}		4.5		pF	$V_{CB}=-10V, f=1MHz$

* Measured under pulsed conditions. Pulse width=300 μs . Duty cycle $\leq 2\%$

$\dagger$ Periodic Sample Test Only.