

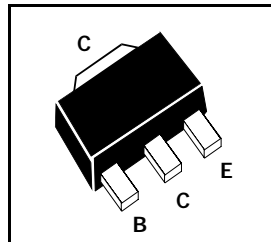
# SOT89 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 3 - JANUARY 1996 

## BFN19

COMPLEMENTARY TYPE - BFN18

PARTMARKING DETAIL - DH



### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	-300	V
Collector-Emitter Voltage	$V_{CEO}$	-300	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Peak Pulse Current	$I_{CM}$	-500	mA
Continuous Collector Current	$I_C$	-200	mA
Base Current	$I_B$	-100	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 $T_{amb} = 25^{\circ}C$ ).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-300		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300		V	$I_C = -1mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	$I_{CBO}$		-100 -20	nA $\mu A$	$V_{CB} = -250V$ $V_{CB} = -250V, T_{amb} = 150^{\circ}C$
Emitter Cut-Off Current	$I_{EBO}$		-100	nA	$V_{EB} = -3V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.5	V	$I_C = -20mA, I_B = -2mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.9	V	$I_C = -20mA, I_B = -2mA$
Static Forward Current Transfer Ratio	$h_{FE}$	25 40 30			$I_C = -1mA, V_{CE} = -10V^*$ $I_C = -10mA, V_{CE} = -10V^*$ $I_C = -30mA, V_{CE} = -10V^*$
Transition Frequency	$f_T$	Typ. 100		MHz	$I_C = -20mA, V_{CE} = -10V$ $f = 20MHz$
Output Capacitance	$C_{obo}$	Typ. 2.5		pF	$V_{CB} = -30V, f = 1MHz$

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