

SOT89 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

ISSUE 3 – MARCH 2001



BF621

FEATURES

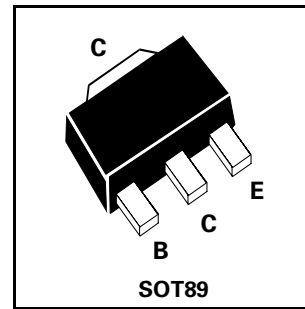
- * High breakdown and low saturation voltage

APPLICATIONS

- * Suitable for video output stages in TV sets
- * Switching power supplies

COMPLEMENTARY TYPE – BF620

PARTMARKING DETAIL – DF



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}	-100	mA
Continuous Collector Current	I_C	-50	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.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-300		V	$I_C = -10\mu A$, $I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300		V	$I_C = -1mA$, $I_B = 0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu A$, $I_C = 0$
Collector Cut-Off Current	I_{CBO}		-10 -20	nA μA	$V_{CB} = -200V$, $I_E = 0$ $V_{CB} = -200V$, $I_E = 0$ †
Collector Cut-Off Current	I_{CER}		-50 -10	nA μA	$V_{CE} = -200V$, $R_{BE} = 2.7K\Omega$ $V_{CE} = -200V$, $R_{BE} = 2.7K\Omega$ †
Emitter Cut-Off Current	I_{EBO}		-10	μA	$V_{EB} = -5V$, $I_C = 0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-0.6	V	$I_C = -30mA$, $I_B = -5mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.9	V	$I_C = -20mA$, $I_B = -2mA^*$
Static Forward Current Transfer Ratio	h_{FE}	50			$I_C = -25mA$, $V_{CE} = -20V^*$
Transition Frequency	f_T		100 Typical	MHz	$I_C = -10mA$, $V_{CE} = -10V$ $f = 100MHz$
Output Capacitance	C_{obo}		0.8 Typical	pF	$V_{CB} = -30V$, $f = 1MHz$

† $T_{amb} = 150^{\circ}C$

* Measured under pulsed conditions.

For typical characteristics graphs see FMMA92 datasheet.

