

SOT89 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

BF620

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FEATURES

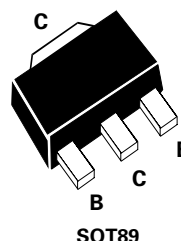
- * High breakdown and low saturation voltages

APPLICATIONS

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

COMPLEMENTARY TYPE: BF621

PARTMARKING DETAIL – DC



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	$V_{CB}=200V, I_E=0$ $V_{CB}=200V, I_E=0 \uparrow$
Collector Cut-Off Current	I_{CER}		50 10	nA μA	$V_{CE}=200V, R_{BE}=2.7K\Omega$ $V_{CE}=200V, R_{BE}=2.7K\Omega \uparrow$
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	$V_{CB}=30V, f=1MHz$

$\uparrow T_{amb}=150^{\circ}C$

*Measured under pulsed conditions.

For typical characteristics graphs see FMMA42 datasheet.

