

SOT89 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTORS

ISSUE 2 – JUNE 1995



BF621
BF623

FEATURES

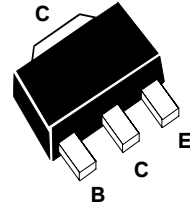
- * High breakdown and low saturation voltage

APPLICATIONS

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

COMPLEMENTARY TYPE – BF621 – BF620
BF623 – BF622

PARTMARKING DETAIL – BF621 – DF
BF623 – DB



SOT89

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	BF621	BF623	UNIT
Collector-Base Voltage	V_{CBO}	-300	-250	V
Collector-Emitter Voltage	V_{CEO}	-300	-250	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 -250		V	$I_C = -10\mu A, I_E = 0$ $I_C = -10\mu A, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300 -250		V	$I_C = -1mA, I_B = 0^*$ $I_C = -1mA, I_B = 0^*$
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. Pulse width=300 μs . Duty cycle $\leq 2\%$
For typical characteristics graphs see FMMA92 datasheet.