SOT89 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

BF620

ISSUE 5 – MARCH 2001 ✪

FEATURES

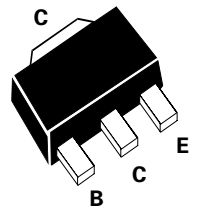
* High breakdown and low saturation voltages

APPLICATIONS

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

COMPLEMENTARY TYPE: BF621

PARTMARKING DETAIL – DC



SOT89

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°C	P_{tot}	1	W
Operating and Storage Temperature Range	T_j:T_{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	300		V	I_C=10μA, 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=100μA, 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 †
Colector Cut-Off Current	I_{CER}		50 10	nA μA	V_{CE}=200V, R_{BE}=2.7KΩ V_{CE}=200V, R_{BE}=2.7KΩ †
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°C
*Measured under pulsed conditions.
For typical characteristics graphs see FMMTA42 datasheet.

ZETEX