

# SOT223 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

## BF721

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### FEATURES

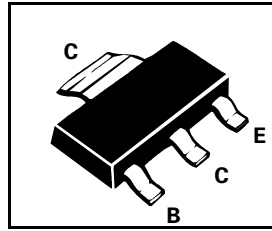
- \* High breakdown and low saturation voltages

### APPLICATIONS

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

COMPLEMENTARY TYPE:- BF720

PARTMARKING DETAILS:- BF721



### 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 $T_{amb}=25^\circ\text{C}$	$P_{tot}$	-2	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ unless otherwise stated).

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

† $T_{amb} = 150^\circ\text{C}$

\*Measured under pulsed conditions.

For typical characteristics graphs see FMMTA92 datasheet.