

# SOT223 NPN SILICON PLANAR HIGH VOLTAGE TRANSISTOR

## BF720

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### FEATURES

- \* High breakdown and low saturation voltages

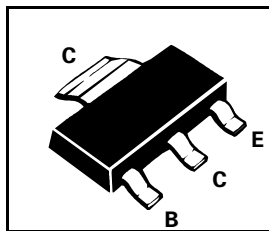
### APPLICATIONS

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

COMPLEMENTARY TYPE:- BF721

PARTMARKING DETAILS:- BF720

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

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

PARAMETER	SYMBOL	MIN.	TYP.	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	nA	$V_{CB}=200V, I_E=0$
Collector Cut-Off Current	$I_{CER}$			50 10	nA $\mu A$	$V_{CE}=200V, R_{BE}=2.7K\Omega$ $V_{CE}=200V, R_{BE}=2.7k\Omega \dagger$
Emitter Cut-Off Current	$I_{EBO}$			10	$\mu A$	$V_{EB}=5V, I_C=0$
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		MHz	$I_C=10mA, V_{CE}=10V$ $f=100MHz$
Output Capacitance	$C_{obo}$		0.8		pF	$V_{CB}=30V, f=1MHz$

† $T_{amb} = 150^{\circ}C$ 

\*Measured under pulsed conditions.

For typical characteristics graphs see FMMTA42 datasheet.