

# SOT223 PNP SILICON PLANAR HIGH VOLTAGE TRANSISTOR

## BSP16

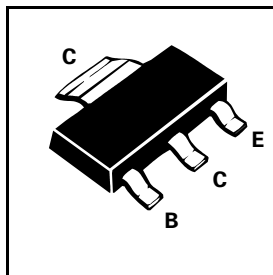
ISSUE 3 – AUGUST 1995

### FEATURES

- \* High  $V_{CE0}$
- \* Low saturation voltage

COMPLEMENTARY TYPE: – BSP19

PARTMARKING DETAIL: – BSP16



### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	$V_{CBO}$	-350	V
Collector-Emitter Voltage	$V_{CEO}$	-300	V
Emitter-Base Voltage	$V_{EBO}$	-6	V
Peak Pulse Current	$I_{CM}$	-1	A
Continuous Collector Current	$I_C$	-0.5	A
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.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-350		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-300		V	$I_C = -10mA$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5		V	$I_E = -100\mu A$
Collector Cut-Off Current	$I_{CBO}$		-1	$\mu A$	$V_{CB} = -280V$
Emitter Cut-Off Current	$I_{EBO}$		-20	$\mu A$	$V_{EB} = -6V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-2.0 -0.5	V V	$I_C = -50mA, I_B = -5mA^*$ $I_C = -30mA, I_B = -3mA^*$
Static Forward Current Transfer Ratio	$h_{FE}$	30	120		$I_C = -50mA, V_{CE} = -10V^*$
Transition Frequency	$f_T$	15		MHz	$I_C = -10mA, V_{CE} = -10V^*$ $f = 30MHz$
Output Capacitance	$C_{obo}$		15	pF	$V_{CB} = -10V, f = 1MHz$

\*Measured under pulsed conditions. Pulse width=300 $\mu s$ . Duty cycle  $\leq 2\%$

For typical characteristics graphs see FMMTA92 datasheet.