

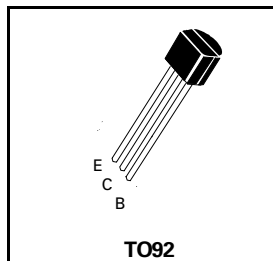
NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

BC368

ISSUE 1 – SEPT 93

FEATURES

- * 20 Volt V_{CEO}
- * 1 Amp continuous current
- * $P_{tot} = 800$ mW



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	25	V
Collector-Emitter Voltage	V_{CEO}	20	V
Emitter-Base Voltage	V_{EBO}	5	V
Continuous Collector Current	I_C	1	A
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	800	mW
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	$V_{(BR)CBO}$	25			V	$I_C=100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	20			V	$I_C=10mA, I_B=0^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	$I_E=100\mu A, I_C=0$
Collector Cut-Off Current	I_{CBO}			10	μA	$V_{CE}=25V$
Emitter Cut-Off Current	I_{EBO}			10	μA	$V_{EB}=5V, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.5	V	$I_C=1A, I_B=100mA^*$
Base-Emitter Turn-on Voltage	$V_{BE(on)}$			1	V	$I_C=1A, V_{CE}=1V^*$
Static Forward Current Transfer Ratio	h_{FE}	50 85 60		375		$I_C=5mA, V_{CE}=10V^*$ $I_C=500mA, V_{CE}=1V^*$ $I_C=1A, V_{CE}=1V^*$
Transition Frequency	f_T	65			MHz	$I_C=10mA, V_{CE}=5V$ $f=100MHz$

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