NPN SILICON PLANAR MEDIUM POWER TRANSISTOR

2N6731

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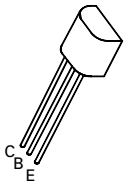
FEATURES

* 80 Volt V_{CEO}
* Gain of 100 at I_C = 350 mA
* P_{tot}=1 Watt



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Peak Pulse Current	I_{CM}	2	A
Continuous Collector Current	I_C	1	A
Power Dissipation at T_{amb}= 25°C	P_{tot}	1	W
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +200	°C

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	100			V	I_C=100μA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	80			V	I_C=10mA, I_B=0*
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	I_E=1mA, I_C=0
Collector Cut-Off Current	I_{CBO}			0.1	μA	V_{CB}=80V, I_E=0
Emitter Cut-Off Current	I_{EBO}			10	μA	V_{EB}=5V, I_C=0
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.35	V	I_C=350mA, I_B=35mA*
Base-Emitter Turn-On Voltage	$V_{BE(on)}$			1.0	V	IC=350mA, V_{CE}=2V*
Static Forward Current Transfer Ratio	h_{FE}	100 100		 300		I_C=10mA, V_{CE}=2V* I_C=350mA, V_{CE}=2V*
Transition Frequency	f_T	50		500	MHz	I_C=200mA, V_{CE}=5V f=20MHz
Collector-Base Capacitance	C_{CB}			20	pF	V_{CB}=10V, f=1MHz

*Measured under pulsed conditions. Pulse width=300μs. Duty cycle ≤2%