FAIRCHILD SEMICONDUCTOR®

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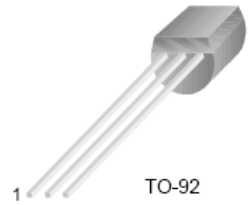
2N6076

PNP Small Signal Transistor



1. Emitter 2. Collector 3. Base

Features

- BVceo .....25V(Min)
- hFE ..... 100(Min) @ Vce=10V, Ic=10mA
- Pb free

Absolute Maximum Ratings T_a = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-25	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	500	mA
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature Range	-55 ~ 150	°C

* 1. These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics* T_a=25°C unless otherwise noted

Symbol	Parameter	Max	Unit
P_C	Collector Power Dissipation, by $R_{\theta JA}$	625	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	200	°C/W

* 2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.
3. These ratings are based on a maximum junction temperature of 150 degrees C.
4. Minimum land pad.

Electrical Characteristics* T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Unit
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = -100μA, I_E = 0	-25		V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = -10mA, I_B = 0	-25		V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = -10μA, I_C = 0	-5		V
I_{CBO}	Collector Cut-off Current	V_{CE} = -25V V_{CE} = -25V, T=+100°C		-100 10	nA uA
I_{CES}	Collector Cut-off Current	V_{CE} = -25V		-100	nA
I_{EBO}	Emitter Cut-off Current	V_{CE} = -3V		-100	nA
h_{FE}	DC Current Gain	V_{CE} = 1V, I_C = -10mA	100	500	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C = -10mA, I_B = -1mA		-0.25	V
V_{BE} (sat)	Base-Emitter Saturation Voltage	I_C = -10mA, I_B = -1mA		-0.80	V
V_{BE} (on)	Base-Emitter On Voltage	V_{CE} = -10V, I_C = -10mA	-0.5	-1.2	V
C_{cb}	Output Capacitance	V_{CB} = -10V, f = 1MHz	1	13	pF
h_{fe}	Small Signal Current Gain	V_{CE}= -10V, I_C = 10mA, f = 1kHz	100	750	

* DC Item are tested by Pulse Test : Pulse Width≤300us, Duty Cycle≤2%

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