

July 2008

2N6076

PNP Small Signal Transistor

Features

- BVceo25V(Min)
- hFE 100(Min) @ Vce=10V, Ic=10mA



Absolute Maximum Ratings $T_a = 25^{\circ}C$ 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* Ta=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	$I_C = -100 \mu A, I_E = 0$	-25		V
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA, I _B = 0	-25		V
BV _{EBO}	Emitter-Base Breakdown Voltage	$I_E = -10\mu A, I_C = 0$	-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	$I_C = -10 \text{mA}, I_B = -1 \text{mA}$		-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	

1

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





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