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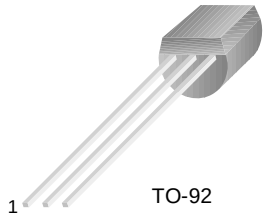
MPS6521

NPN General Purpose Amplifier

- This device is deisgned for general purpose amplifier applications at collector to 300mA.
- Sourced from process 10.



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1. Emitter 2. Base 3. Collector

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	25	V
V_{CBO}	Collector-Base Voltage	40	V
V_{EBO}	Emitter-Base Voltage	4.0	V
I_C	Collector Current - Continuous	100	mA
T_J, T_{STG}	Operating and Storage Junction Temperature Range	- 55 ~ 150	°C

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
Off Characteristics					
$V_{(BR)CEO}$	Collector-Emitter Sustaining Voltage *	I_C = 500μA, I_B = 0	25		V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E = 10μA, I_C = 0	4		V
I_{CBO}	Emitter Cutoff Current	V_{CB} = 30V, I_E = 0		50	nA
On Characteristics					
h_{FE}	DC Current Gain	V_{CE} = 10V, I_C = 100μA V_{CE} = 10V, I_C = 2.0mA	150 300	 600	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 50mA, I_B = 5.0mA		0.5	V

* Pulse Test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2.0%

Thermal Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Max.	Units
P_D	Total Device Dissipation Derate above 25°C	625 5	mW mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	83.3	°C/W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	200	°C/W

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Package Dimensions

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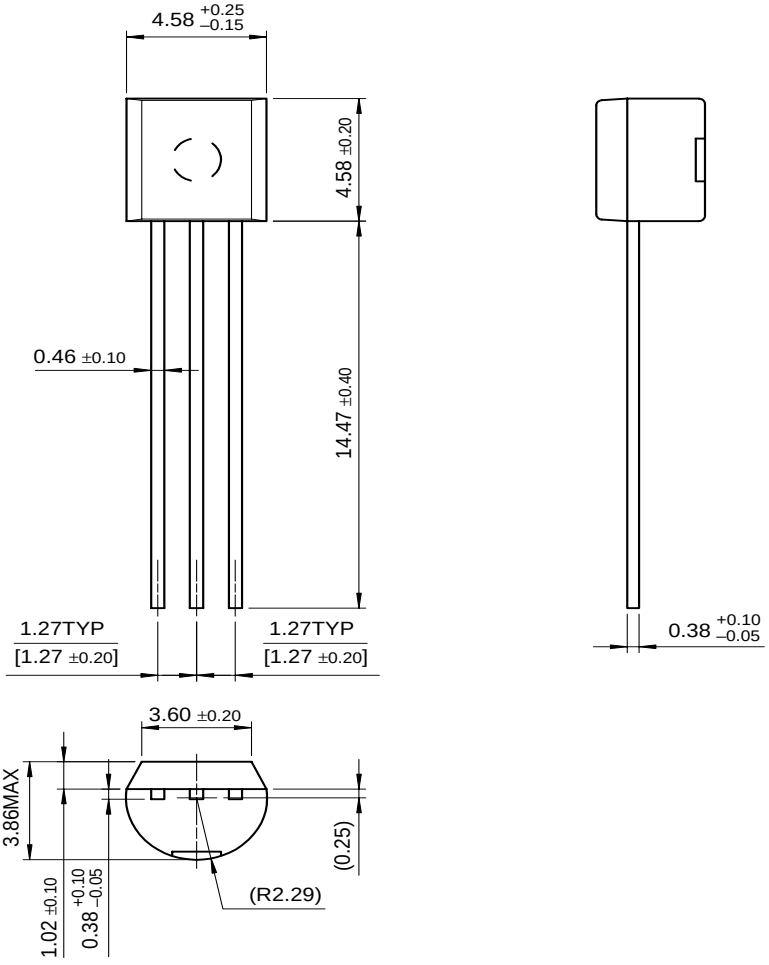

Dimensions in Millimeters

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