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Fairchild Semiconductor
MPS751

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EIS electronic components
Distributor of Fairchild Semiconductor: Excellent Integrated System Limited
Datasheet of MPS751 - TRANS PNP 60V 2A TO-92
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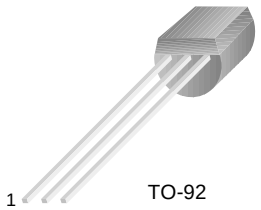
FAIRCHILD SEMICONDUCTOR®

MPS751

Silicon PNP Transistor (Note 1)

- Low Saturation Voltage



TO-92

1. Emitter 2. Base 3. Collector

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	-60	V
I_C	Collector Current (DC)	2	A
P_C	Collector Dissipation (T_a=25°C) (Note 2, 3)	625	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Voltage	I_C = 100μA	-80			V
BV_{CEO}	Collector-Emitter Voltage	I_C = 10mA	-60			V
BV_{EBO}	Emitter-Base Voltage	I_E = 10μA	-5			V
I_{CBO}	Collector Cut-off Current	V_{CB} = 30V			100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 3V			100	nA
h_{FE}	DC Current Gain	V_{CE} = 2V, I_C = 50mA V_{CE} = 2V, I_C = 500mA V_{CE} = 2V, I_C = 1A V_{CE} = 2V, I_C = 2A	75 75 75 40			
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 2A, I_B = 200mA I_C = 1A, I_B = 100mA			0.5 0.3	V
V_{BE}(sat)	Base-Emitter Saturation Voltage	I_C = 1A, I_B = 100mA			1.2	V
V_{BE}(on)	Base-Emitter On Voltage	V_{CE} = 5V, I_C = 2mA			1	V
f_T	Current gain Bandwidth Product	V_{CE} = 5V, I_C = 50mA f = 100MHz	75			MHz

Notes:
1. These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.
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 150degrees C.

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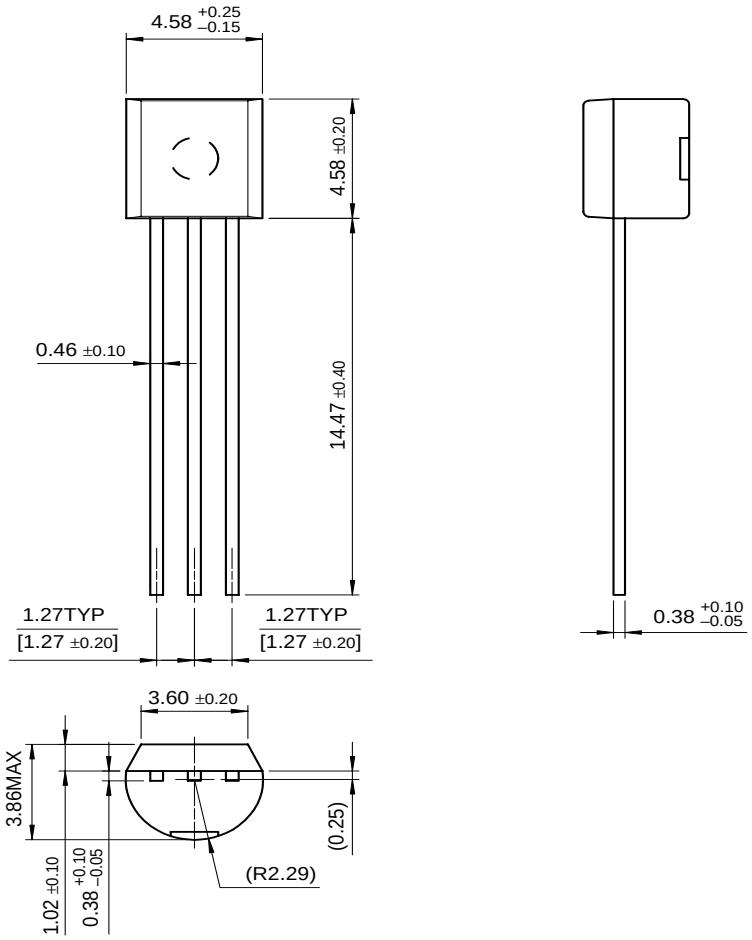
Package Dimensions

TO-92



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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Definition of Terms

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

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