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## ON Semiconductor®

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### **MPS751**

### Silicon PNP Transistor (Note 1)

• Low Saturation Voltage



### Absolute Maximum Ratings $T_C=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CEO</sub>	Collector-Emitter Voltage	-60	V
I <sub>C</sub>	Collector Current (DC)	2	Α
P <sub>C</sub>	Collector Dissipation (T <sub>a</sub> =25°C) (Note 2, 3)	625	mW
TJ	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	- 55 ~ 150	°C

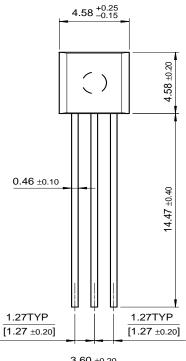
### **Electrical Characteristics** $T_C=25$ °C unless otherwise noted

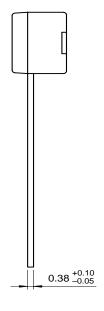
Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CBO</sub>	Collector-Base Voltage	I <sub>C</sub> = 100μA	-80			V
BV <sub>CEO</sub>	Collector-Emitter Voltage	I <sub>C</sub> = 10mA	-60			V
BV <sub>EBO</sub>	Emitter-Base Voltage	$I_E = 10\mu A$	-5			V
I <sub>CBO</sub>	Collector Cut-off Current	V <sub>CB</sub> = 30V			100	nA
I <sub>EBO</sub>	Emitter Cut-off Current	V <sub>EB</sub> = 3V			100	nA
h <sub>FE</sub>	DC Current Gain	$V_{CE} = 2V, I_{C} = 50 \text{mA}$ $V_{CE} = 2V, I_{C} = 500 \text{mA}$ $V_{CE} = 2V, I_{C} = 1A$ $V_{CE} = 2V, I_{C} = 2A$	75 75 75 40			
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	$I_C = 2A, I_B = 200mA$ $I_C = 1A, I_B = 100mA$			0.5 0.3	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage	I <sub>C</sub> = 1A, I <sub>B</sub> = 100mA			1.2	V
V <sub>BE</sub> (on)	Base-Emitter On Voltage	$V_{CE} = 5V$ , $I_C = 2mA$			1	V
f <sub>T</sub>	Current gain Bandwidth Product	$V_{CE} = 5V, I_{C} = 50mA$ f = 100MHz	75			MHz

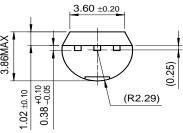
- These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.
   These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.
   These ratings are based on a maximum junction temperature of 150degrees C.

## **Package Dimensions**

TO-92







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Across the board.	. Around the world.™	OCXPro™	RapidConnect™	UltraFET <sup>®</sup>
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#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина,

дом 2, корпус 4, литера А.