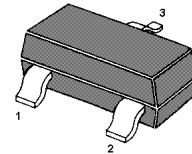


# MMBT5400

**PNP Silicon Epitaxial Planar Transistor**  
for high voltage .

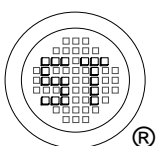


1. Base 2. Emitter 3. Collector

SOT-23 Plastic Package

## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	130	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	120	V
Emitter Base Voltage	$-V_{\text{EBO}}$	5	V
Collector Current Continuous	$-I_{\text{C}}$	600	mA
Power Dissipation	$P_{\text{tot}}$	200	mW
Junction Temperature	$T_{\text{J}}$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{S}}$	-55 to +150	$^\circ\text{C}$



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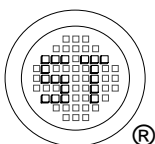


Dated : 20/10/2005

# MMBT5400

## Characteristics at $T_{amb}=25^{\circ}\text{C}$

	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE}=5\text{V}$ , $-I_C=10\text{mA}$	$h_{FE}$	40	180	-
Collector Base Breakdown Voltage at $-I_C=0.1\text{mA}$	$-V_{(BR)CBO}$	130	-	V
Collector Emitter Breakdown Voltage at $-I_C=1\text{mA}$	$-V_{(BR)CEO}$	120	-	V
Emitter Base Breakdown Voltage at $-I_E=0.1\text{mA}$	$-V_{(BR)EBO}$	5	-	V
Collector Cutoff Current at $-V_{CB}=100\text{V}$	$-I_{CBO}$	-	0.05	$\mu\text{A}$
Emitter Cutoff Current at $-V_{EB}=3\text{V}$	$-I_{EBO}$	-	0.05	$\mu\text{A}$
Collector Emitter Saturation Voltage at $-I_C=50\text{mA}$ , $-I_B=5\text{mA}$	$-V_{CE(sat)}$	-	0.5	V
Base Emitter Saturation Voltage at $-I_C=50\text{mA}$ , $-I_B=5\text{mA}$	$-V_{BE(sat)}$	-	1	V
Current Gain Bandwidth Product at $-V_{CE}=10\text{V}$ , $-I_C=10\text{mA}$	$f_T$	100	-	MHz
Output Capacitance at $-V_{CB}=10\text{V}$ , $f=1\text{MHz}$	$C_{ob}$	-	6	pF
Noise Figure at $-I_C=0.2\text{mA}$ , $-V_{CE}=5\text{V}$ , $f=15.7\text{KHz}$	NF	-	8	dB



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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098

Dated : 20/10/2005