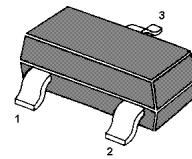


# MMBT5400

## PNP Silicon Epitaxial Planar Transistor

for high voltage .



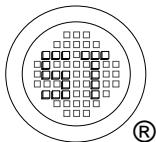
1. Base 2. Emitter 3. Collector  
TO-236 Plastic Package

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

Parameter	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	$-I_C$	600	mA
Power Dissipation	$P_{\text{tot}}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{stg}}$	- 55 to + 150	$^\circ\text{C}$

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

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



**SEMTECH ELECTRONICS LTD.**



ISO/TS 16949 : 2009 ISO 14001 : 2004 ISO 9001 : 2008 BS-OHSAS 18001 : 2007 IECQ QC 080000 Certificate No. 160719000 Certificate No. 7116 Certificate No. 5071310 Certificate No. 7116 Certificate No. PRC-HSPM-1603-1

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