



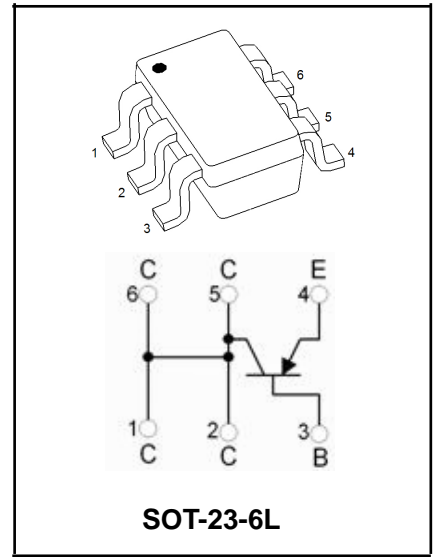
HTL818B TRANSISTOR (PNP)

FEATURE

Very low collector to emitter saturation voltage

APPLICATIONS

- Power management in portable equipments
- Switching regulator in battery charge applications



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CBO}	Collector-Base Voltage	-30	V
V _{CEO}	Collector-Emitter Voltage	-30	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-3	A
P _C	Collector Dissipation	0.35	W
R _{θJA}	Thermal Resistance from Junction to Ambient	357	°C/W
P _{tot}	Total Dissipation at T _C = 25°C	1.2	W
R _{θJC}	Thermal Resistance from Junction to case (note 1)	104.2	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

Note 1: Package mounted on FR4 pcb 25mm x 25mm.



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Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C=-10\text{mA}, I_B=0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-30\text{V}, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-0.1	μA
DC current gain	h_{FE}^*	$V_{CE}=-1\text{V}, I_C=-0.5\text{A}$	100			
		$V_{CE}=-1\text{V}, I_C=-0.5\text{A}$	100		400	
		$V_{CE}=-3\text{V}, I_C=-2.5\text{A}$	100			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=-0.5\text{A}, I_B=-5\text{mA}$			-0.15	V
		$I_C=-1.2\text{A}, I_B=-12\text{mA}$			-0.45	V
		$I_C=-2\text{A}, I_B=-20\text{mA}$			-0.8	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C=-0.5\text{A}, I_B=-5\text{mA}$			-1.1	V
		$I_C=-1.2\text{A}, I_B=-12\text{mA}$			-1.1	V
		$I_C=-2\text{A}, I_B=-20\text{mA}$			-1.2	V
Base-emitter on voltage	$V_{BE(on)}^*$	$I_C=-0.5\text{A}, V_{CE}=-2\text{V}$			-1.1	V

*Pulse test: pulse width $\leq 300\mu\text{s}$, duty cycle $\leq 2.0\%$.



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Typical Characteristics

