

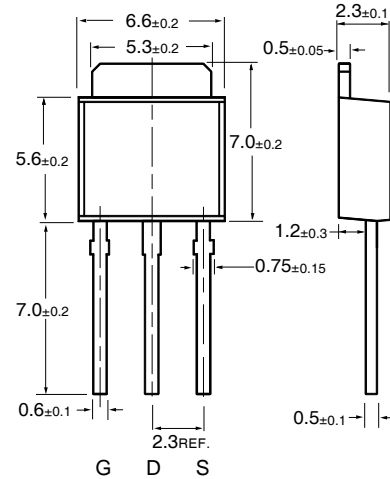
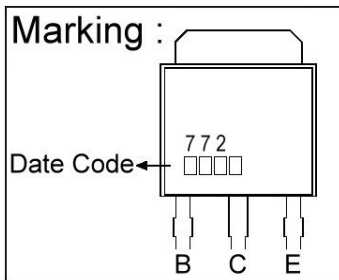
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

TO-251

Description

The 2SB772L is designed for using in output stage of 10W amplifier, voltage regulator, DC-DC converter and relay driver.



Dimensions in millimeters

MAXIMUM RATINGS* ($T_{amb}=25^{\circ}\text{C}$, unless otherwise specified)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current (DC)	-3	A
	Collector Current (Pulse)	-7	
I_B	Base Current	-0.6	A
P_D	Total Power Dissipation	10	W
T_J, T_{stg}	Junction and Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS $T_{amb}=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	-40	-	-	V	$I_C=-100\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	BV_{CEO}	-30	-	-	V	$I_C=-1\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	-5	-	-	V	$I_E=-10\mu\text{A}, I_C=0$
Collector-Base Cutoff Current	I_{CES}	-	-	-1	μA	$V_{CB}=-30\text{V}, I_E=0$
Emitter-Base Cutoff Current	I_{EBO}	-	-	-1	μA	$V_{EB}=-3\text{V}, I_C=0$
Collector Saturation Voltage	* $V_{CE(sat)}$	-	-0.3	-0.5	V	$I_C=-2\text{A}, I_B=-0.2\text{A}$
Base Saturation Voltage	* $V_{BE(sat)}$	-	-1	-2	V	$I_C=-2\text{A}, I_B=-0.2\text{A}$
DC Current Gain	* h_{FE1}	30	-	-		$V_{CE}=-2\text{V}, I_C=-20\text{mA}$
	* h_{FE2}	100	-	500		$V_{CE}=-2\text{V}, I_C=-20\text{mA}$
Gain-Bandwidth Product	fT	-	80	-	MHz	$V_{CE}=-5\text{V}, I_C=-0.1\text{mA}, f=100\text{MHz}$
Output Capacitance	C_{ob}	-	55	-	pF	$V_{CB}=-10\text{V}, f=1\text{MHz}, I_E=0$

*Pulse test: Pulse width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$

Classification of h_{FE}

Rank	Q	R	S
Range	100~200	160~320	250~500

Typical Characteristics

