

isc Silicon PNP Power Transistor

2SB537

DESCRIPTION

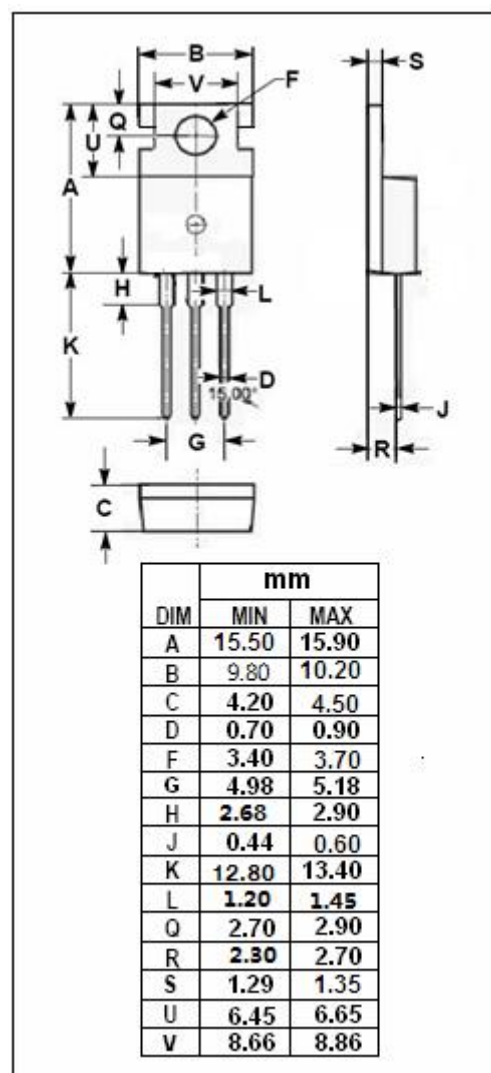
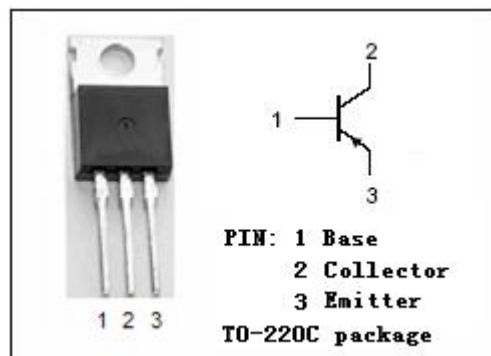
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = -120V(\text{Min})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -2.0(\text{Max.}) @ I_C = -1A$
- Complement to Type 2SD382
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Audio frequency power amplifier, low speed switching.
- Suitable for driver of 60~100 watts audio amplifier.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-130	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-1.5	A
I_{CM}	Collector Current-Peak	-3.0	A
I_B	Base Current	-0.3	A
P_C	Collector Power Dissipation@ $T_C=25^\circ\text{C}$	20	W
	Collector Power Dissipation@ $T_a=25^\circ\text{C}$	1.5	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1A; I_B = -0.1A$			-2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1A; I_B = -0.1A$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -120V; I_E = 0$			-1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -3V; I_C = 0$			-1.0	μA
h_{FE-1}	DC Current Gain	$I_C = -5mA; V_{CE} = -5V$	25			
h_{FE-2}	DC Current Gain	$I_C = -0.3A; V_{CE} = -5V$	40		250	
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10V; f = 0.1MHz$		35		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -0.1A; V_{CE} = -5V$		40		MHz

◆ **h_{FE} Classifications**

N	M	L	K
40-80	60-120	80-160	120-250

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