

General Description

The 2SB1203 is PNP silicon power transistor, Designed for general purpose amplifier and low speed switching applications.

Product Summary

VCBO	VCEO	IC
-60V	-50V	-5A

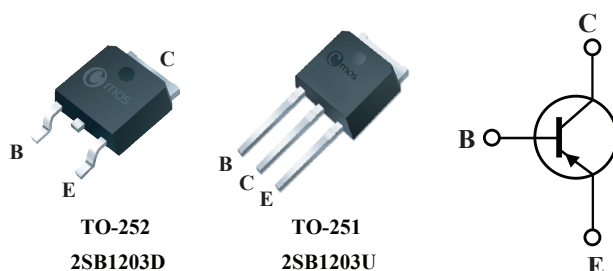
Applications

- Ideal for Medium Power Switching

Features

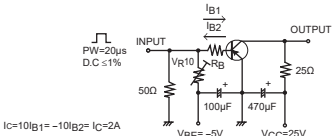
- Epitaxial Planar Die Construction
- Low Collector-Emitter Saturation Voltage
- RoHS Compliant

TO-252/251 Pin Configuration

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

Symbol	Parameter	Rating	Units
V_{CBO}	Collector to Base Voltage	-60	V
V_{CEO}	Collector to Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-5	A
I_{CP}	Collector Current (Pulse)	-8	A
P_C	Collector Dissipation($T_c=25^\circ\text{C}$)	20	W
T_{STG}	Storage Temperature Range	-55 to 150	$^\circ\text{C}$
T_J	Junction Temperature	150	$^\circ\text{C}$

Electrical Characteristics (Ta =25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector Cutoff Current	ICBO	V _{CB} =-40V, I _E =0A			-1	μA
Emitter Cutoff Current	IEBO	V _{EB} =-5V, I _C =0A			-1	μA
DC Current Gain	h _{FE}	V _{CE} =-2V, I _C =-500mA	70*		400*	
Gain-Bandwidth Product	f _T	V _{CE} =-5V, I _C =-1A		130		MHz
Output Capacitance	C _{ob}	V _{CB} =-10V, f=1MHz		60		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =-3A, I _B =-150mA		-0.2	-0.6	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =-3A, I _B =-150mA		-1.24	-1.5	V
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =-10μA, I _E =0A	-60			V
Collector-to-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C =-1mA, R _{BE} =∞	-50			V
Emitter-to-Base Breakdown Voltage	V _{(BR)EBO}	I _E =-10μA, I _C =0A	-6			V
Turn-ON Time	t _{on}			50		ns
Storage Time	t _{stg}			500		ns
Fall Time	t _f			20		ns

*The 2SB1203 are classified by 500mA h_{FE} as follows :

Rank	Q	R	S	T
h _{FE}	70 to 140	100 to 200	140 to 280	200 to 400

This product has been designed and qualified for the consumer market.
 Cmos assumes no liability for customers' product design or applications.
 Cmos reserves the right to improve product design, functions and reliability without notice.