

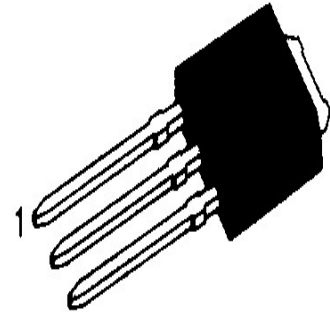
# 2SB1203

## PNP EPITAXIAL SILICON TRANSISTOR

### ABSOLUTE MAXIMUM RATINGS( $T_a=25$ )

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	-60	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter -Base Voltage	$V_{EBO}$	-6	V
Collector Current (DC)	$I_c$	-3	A
Collector Current (Pulse)	$I_{cp}$	-5	A
Collector Dissipation ( $T_c=25$ )	$P_c$	10	W
Junction Temperature	$T_J$	150	
Storage Temperature	$T_{STG}$	-55 ~150	

**TO-251**



1.Base 2.Collector 3.Emitter

### ELECTRICAL CHARACTERISTICS( $T_a=25$ )

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Cutoff Current	$I_{CB0}$	$V_{CB} = -40V, I_E = 0$			-1	$\mu A$
Emitter-Cutoff Current	$I_{EBO}$	$V_{EB} = -4V, I_c = 0$			-1	$\mu A$
*DC Current Gain	$h_{FE1}$	$V_{CE} = -2V, I_c = -0.5A$	70		400	
	$h_{FE2}$	$V_{CE} = -2V, I_c = -4A$	35			
Current Gain-Bandwidth Product	$f_T$	$V_{CE} = -5V, I_c = -1A$		130		MHZ
Output Capacitance	$C_{OB}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$		60		pF
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c = -2A, I_B = -0.10A$		-280	-550	mV
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_c = -2A, I_B = -0.10A$		-0.95	-1.3	V
Collector-to-Base Breakdown Voltage	$V_{BR(CBO)}$	$I_c = -10 \mu A, I_E = 0$		-60		V
Collector-to-Emitter Breakdown Voltage	$V_{BR(CEO)}$	$I_c = -1mA, R_{BE} =$		-50		V
Emitter-to-Base Breakdown Voltage	$V_{BR(EBO)}$	$I_E = -10 \mu A, I_c = 0$		-6		V
Turn-ON Time	$t_{ON}$	See specified Test Circuit		50		ns
Storage Time	$t_{stg}$	See specified Test Circuit		450		ns
Fall Time	$t_f$	See specified Test Circuit		20		ns

### HFE (2) CLASSIFICATION

Classification	Q	R	S	T
HFE(2)	70-140	100-200	140-280	200-400