

SANYO	No.3250	2SB1455/2SD2203
		PNP/NPN Epitaxial Planar Silicon Transistors
High-Current Switching Applications		

Features

- Low collector-to-emitter saturation voltage
- Large current capacity
- Micaless package facilitating easy mounting

() : 2SB1455

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V _{CB0}	(-)90	V
Collector-to-Emitter Voltage	V _{CEO}	(-)80	V
Emitter-to-Base Voltage	V _{EBO}	(-)6	V
Collector Current	I _C	(-)7	A
Collector Current (Pulse)	I _{CP}	(-)12	A
Collector Dissipation	P _C	2.0	W
		30	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

T_c = 25°C

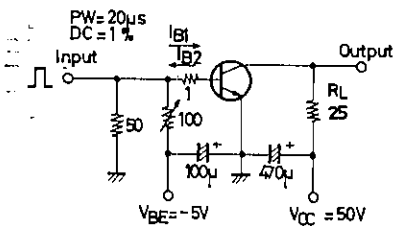
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} = (-)80V, I _E = 0			(-)0.1	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} = (-)4V, I _C = 0			(-)0.1	mA
DC Current Gain	h _{FE} (1)	V _{CE} = (-)2V, I _C = (-)1A	70*		280*	
	h _{FE} (2)	V _{CE} = (-)2V, I _C = (-)4A	30			
Gain-Bandwidth Product	f _T	V _{CE} = (-)5V, I _C = (-)1A		20		MHz
C-E Saturation Voltage	V _{CE(sat)}	I _C = (-)4A, I _B = (-)0.4A			0.4	V
					(-0.5)	
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = (-)1mA, I _E = 0	(-)90			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C = (-)1mA, R _{BE} = ∞	(-)80			V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E = (-)1mA, I _C = 0	(-)6			V
Turn-ON Time	t _{on}	See specified Test Circuit.	(0.2)0.1			μs
Storage Time	t _{stg}	"	(0.7)1.6			μs
Fall Time	t _f	"	(0.2)0.4			μs

* : The 2SB1455/2SD2203 are classified by 1A h_{FE} as follows :

70	Q	140	100	R	200	140	S	280
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Switching Time Test Circuit



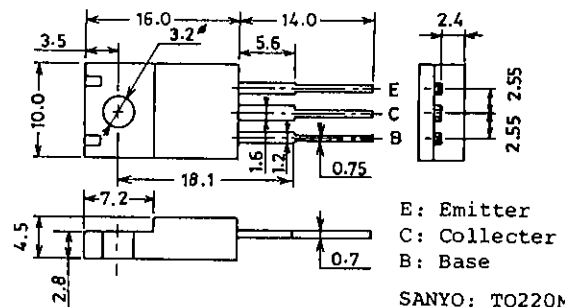
10 IB1 = -10 IB2 = I_C = 2A

For PNP, the polarity is reversed.

Unit (Resistance : Ω, Capacitance : F)

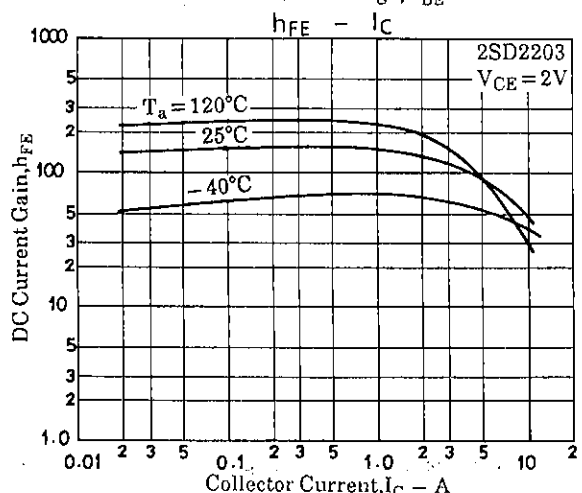
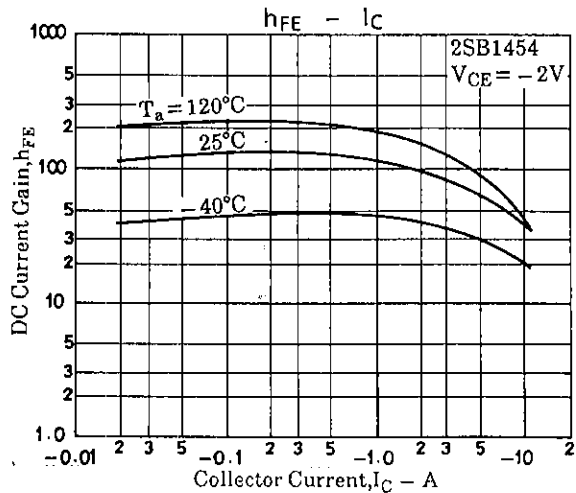
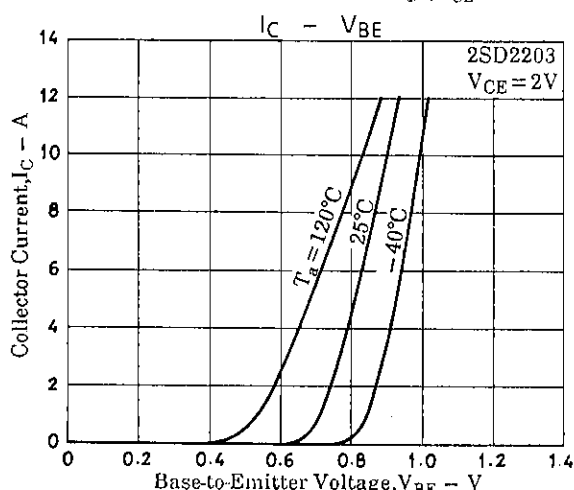
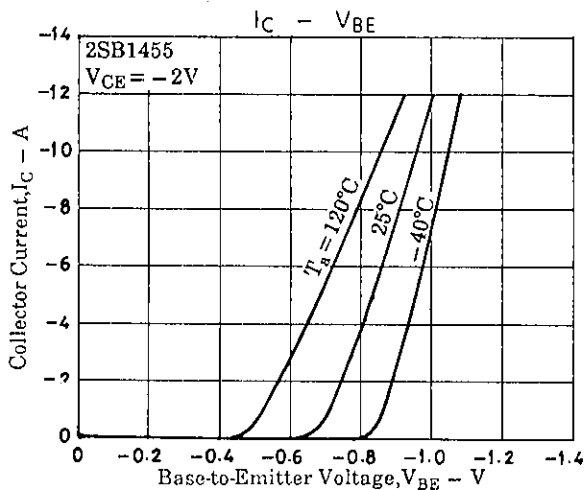
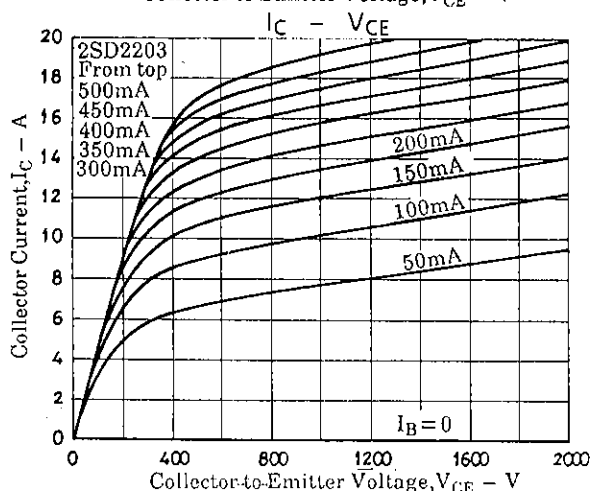
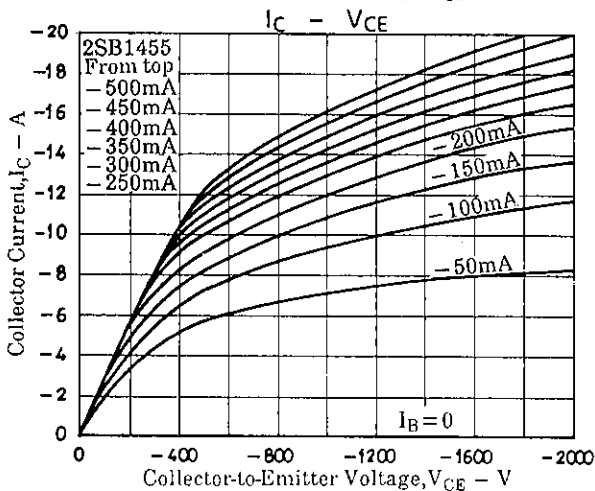
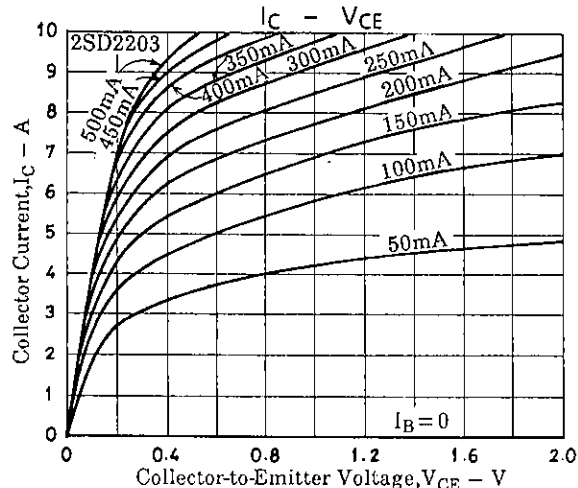
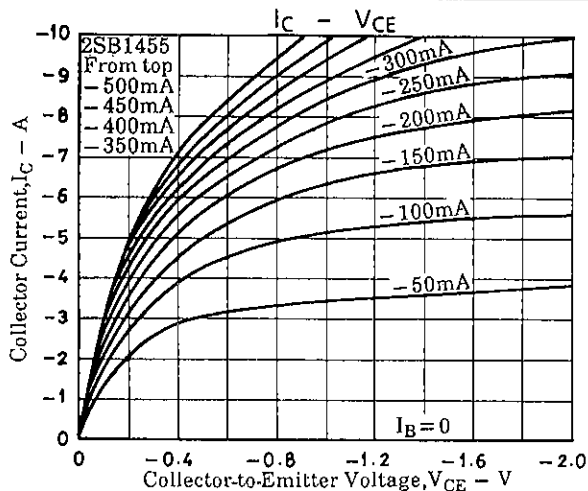
Package Dimensions 2041

(unit : mm)

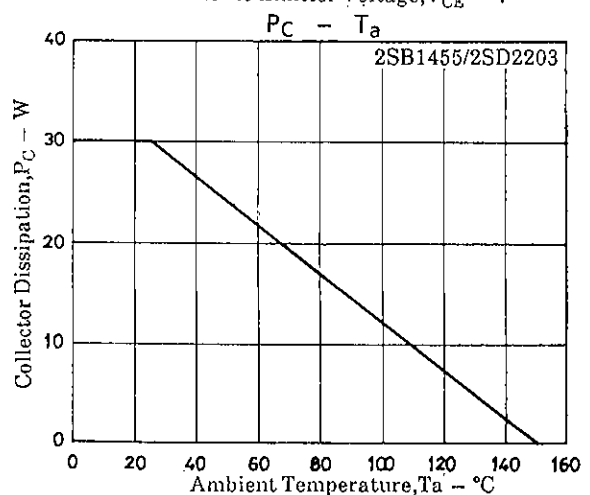
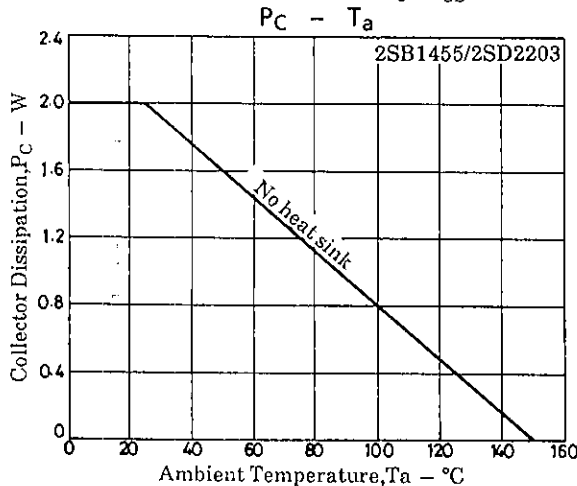
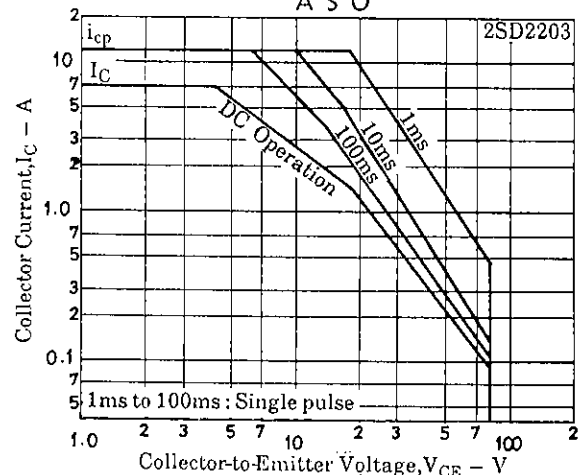
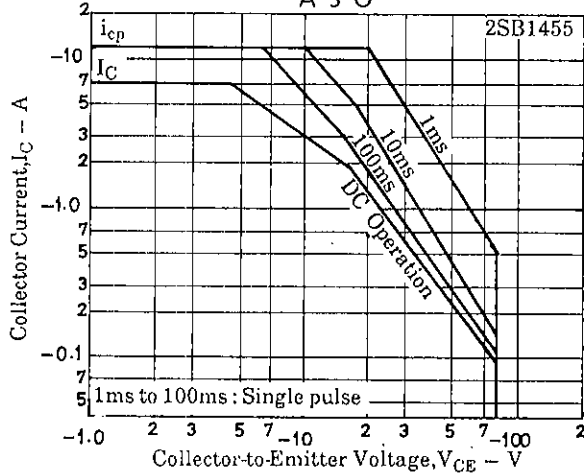
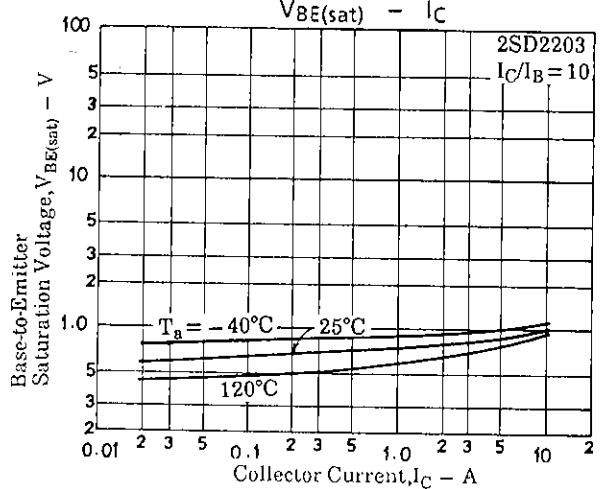
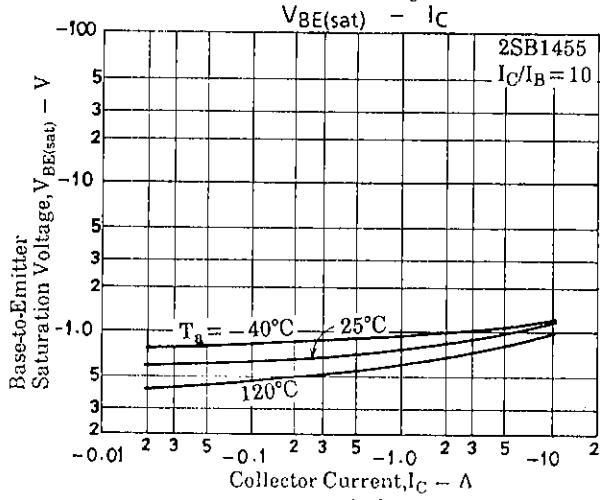
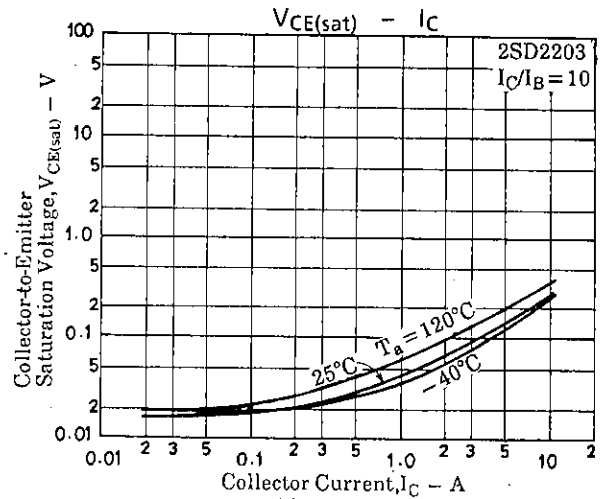
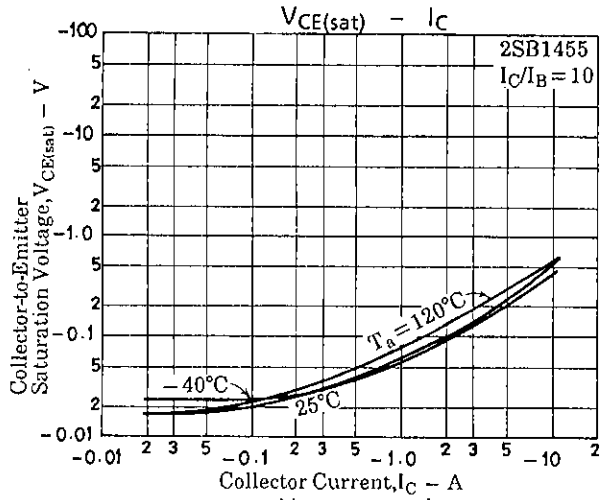


E: Emitter
C: Collector
B: Base

SANYO: TO220ML



2SB1455/2SD2203



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