

SANYO

2SB1455/2SD2203

PNP/NPN Epitaxial Planar Silicon Transistors

80V/7A Switching Applications

Features

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

() : 2SB1455

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

Absolute Maximum Ratings at Ta = 25°C			unit
Collector-to-Base Voltage	V _{CBO}	(-)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
T _c = 25°C			
Junction Temperature	T _j	30	W
Storage Temperature	T _{stg}	150	°C
		-55 to +150	°C

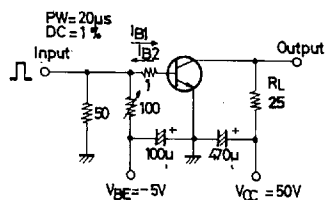
Electrical Characteristics at $T_a = 25^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)80\text{V}, I_E = 0$			(-)0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4\text{V}, I_C = 0$			(-)0.1	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = (-)2\text{V}, I_C = (-)1\text{A}$	70※		280※	
	$h_{FE(2)}$	$V_{CE} = (-)2\text{V}, I_C = (-)4\text{A}$	30			
Gain-Bandwidth Product	f_T	$V_{CE} = (-)5\text{V}, I_C = (-)1\text{A}$		20		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)4\text{A}, I_B = (-)0.4\text{A}$			0.4	V
					(- 0.5)	
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)1\text{mA}, I_E = 0$	(-)90			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1\text{mA}, R_{BE} = \infty$	(-)80			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)1\text{mA}, I_C = 0$	(-)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 hFE as follows :

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

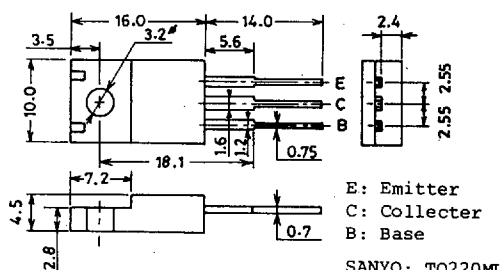

$$10 I_{B1} = -10 I_{B2} = I_C = 2A$$

For PNP, the polarity is reversed.

Unit (Resistance : Ω , Capacitance : F)

Package Dimensions 2041

(unit : mm)



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