

	No.3364	2SB1468/2SD2219
		PNP/NPN Epitaxial Planar Silicon Transistors
		30V/8A High-Speed Switching Applications

Applications

- Relay drivers, high-speed inverters, converters, etc.

Features

- Micaless package facilitating mounting
- Low collector-to-emitter saturation voltage: $V_{CE(sat)} = -0.5V$ (PNP), $0.4V$ (NPN) max.
- Large current capacity

() : 2SB1468

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

			unit
Collector-to-Base Voltage	V_{CB0}	(-)60	V
Collector-to-Emitter Voltage	V_{CE0}	(-)30	V
Emitter-to-Base Voltage	V_{EB0}	(-)6	V
Collector Current	I_C	(-)12	A
Collector Current (Pulse)	I_{CP}	(-)20	A
Collector Dissipation	P_C	2	W
		25	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

$T_c = 25^\circ\text{C}$

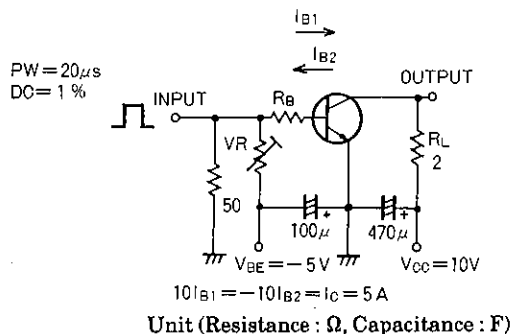
Electrical Characteristics at $T_a = 25^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)40V, I_E = 0$			(-)0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4V, I_C = 0$			(-)0.1	mA
DC Current Gain	$h_{FE}(1) \times$	$V_{CE} = (-)2V, I_C = (-)1A$	70		280	
	$h_{FE}(2)$	$V_{CE} = (-)2V, I_C = (-)6A$	30			
Gain-Bandwidth Product	f_T	$V_{CE} = (-)5V, I_C = (-)1A$		120		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)5A, I_B = (-)0.25A$			(-0.5)	V
					0.4	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)1mA, I_E = 0$	(-)60			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = \infty$	(-)30			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.	(0.1)0.2			μs
Storage Time	t_{stg}	Same as above.	(0.3)0.5			μs
Fall Time	t_f	Same as above.	0.03			μs

※ : The 2SB1468/2SD2219 are classified by 1A h_{FE} as follows :

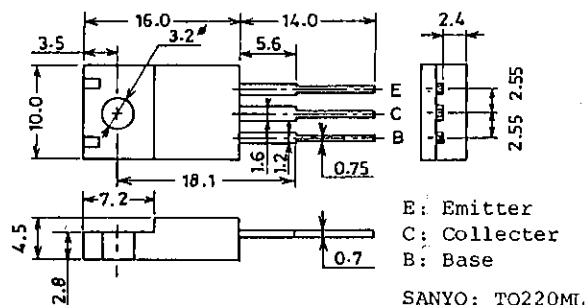
70 Q 140	100 R 200	140 S 280
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Switching Time Test Circuit



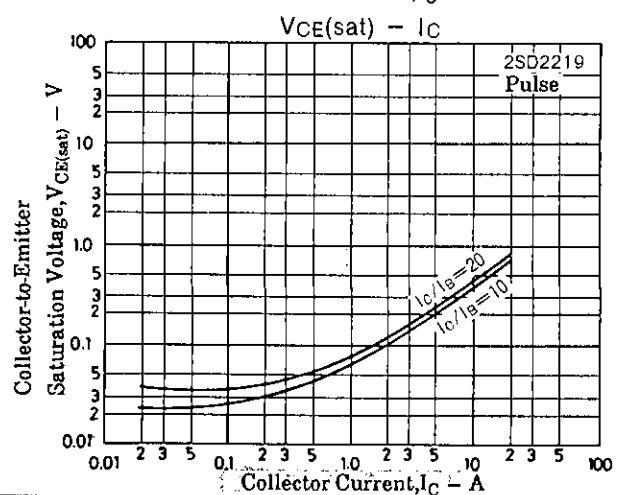
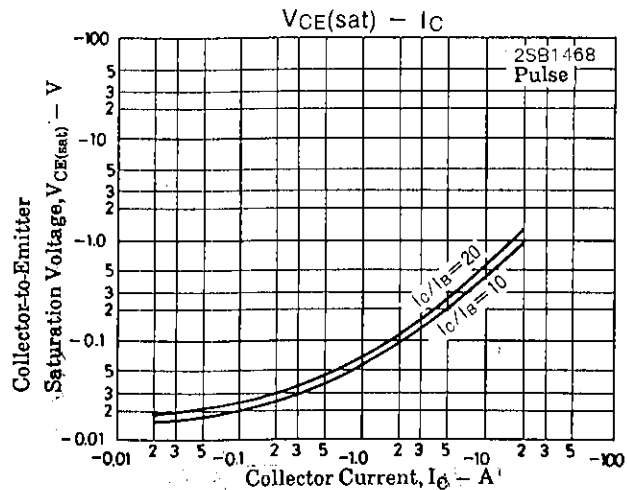
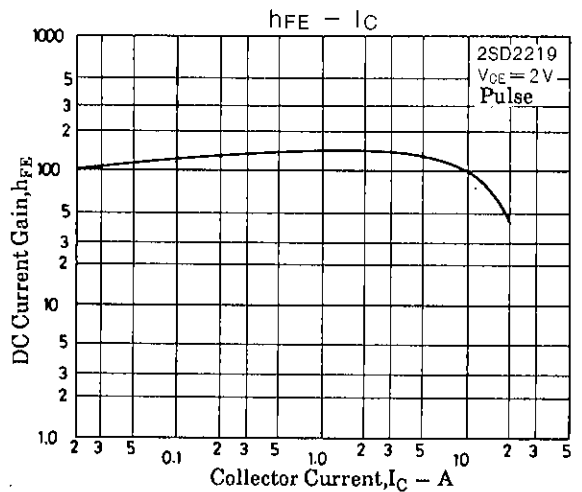
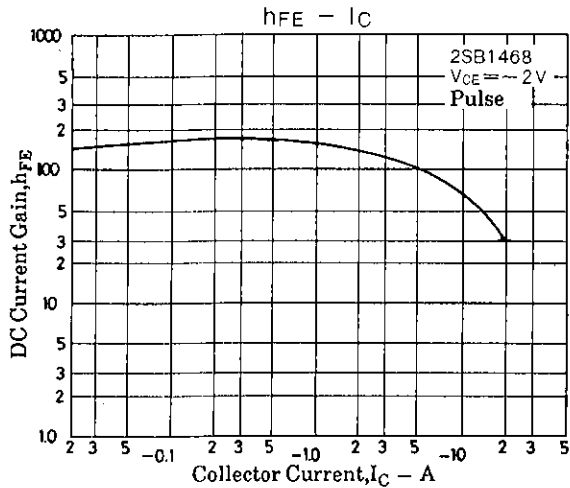
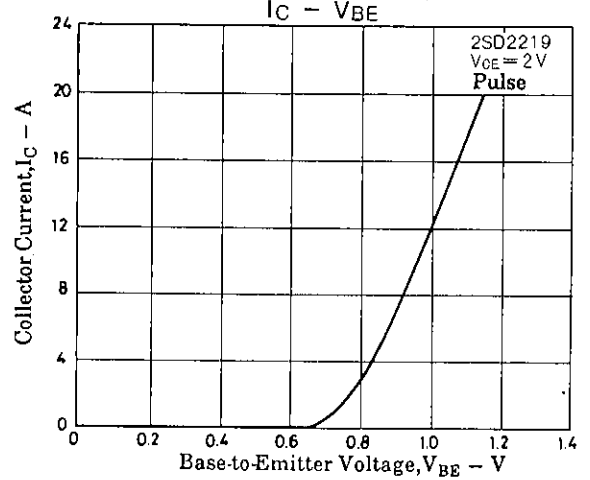
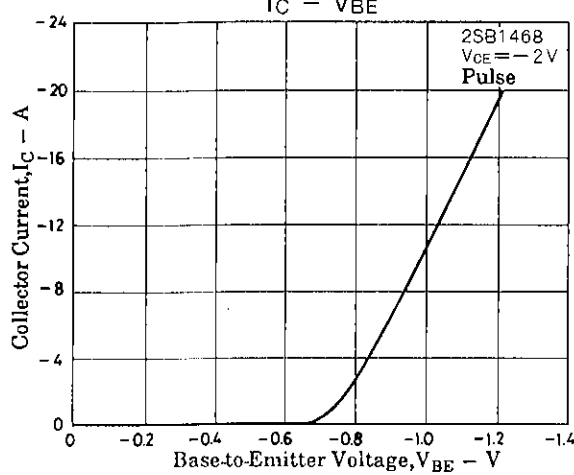
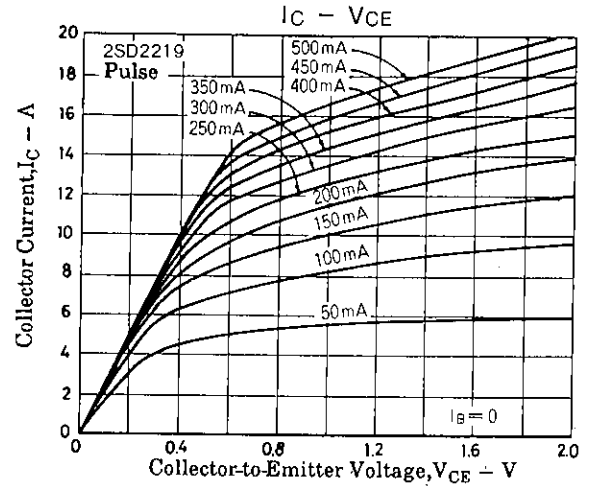
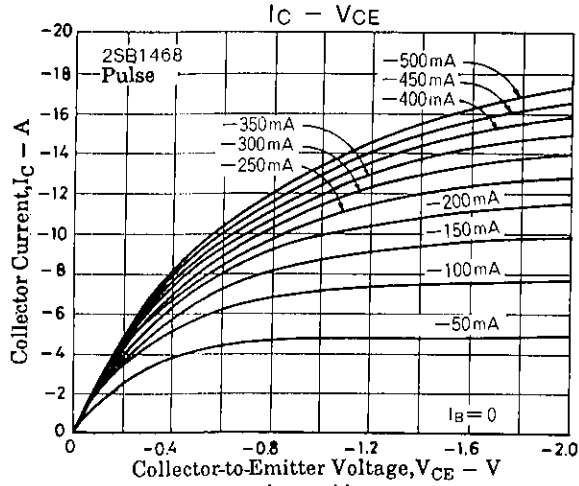
Package Dimensions 2041

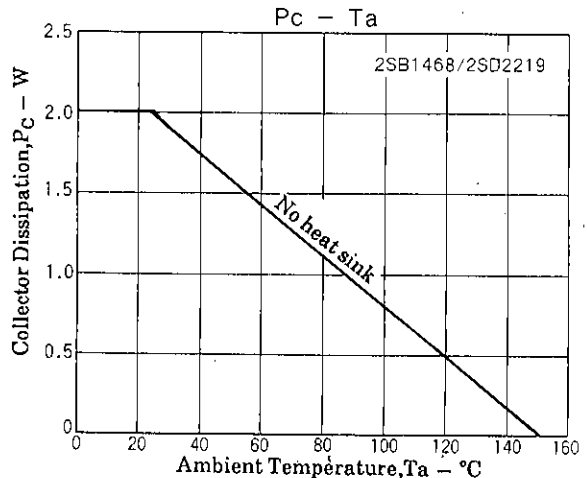
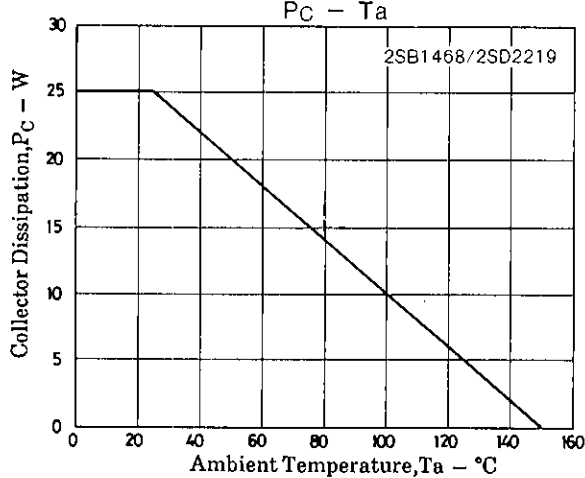
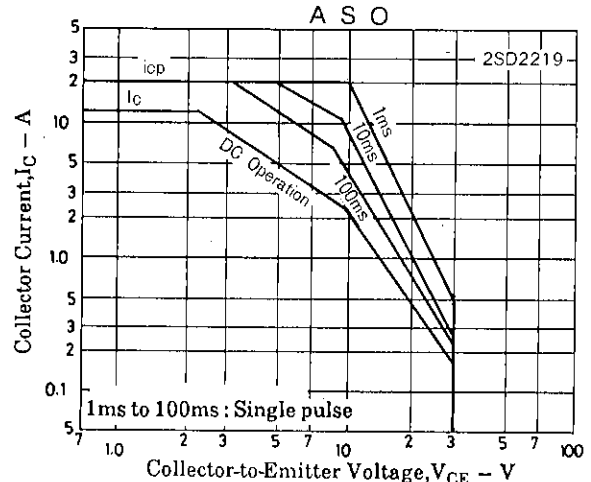
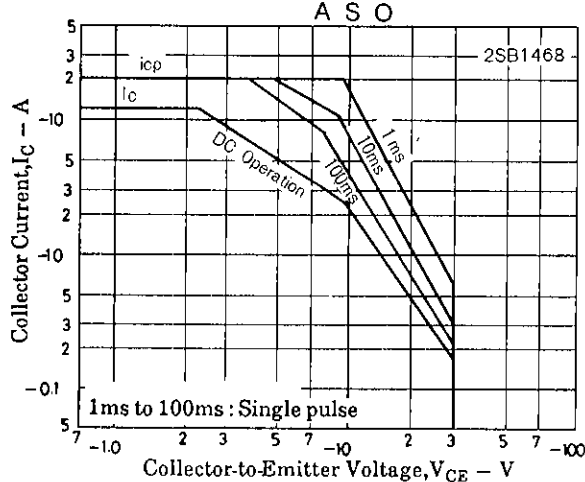
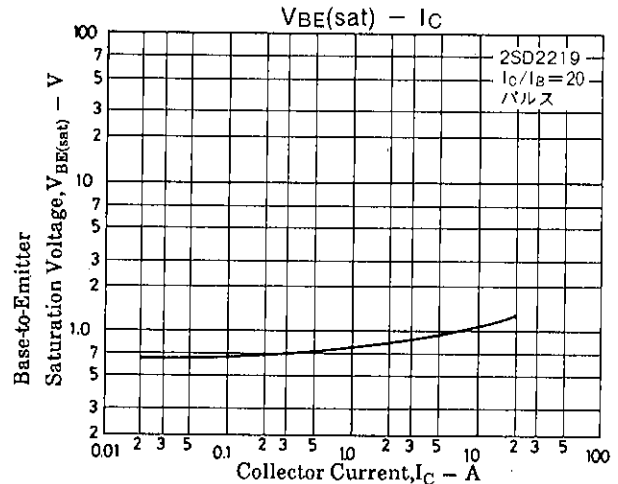
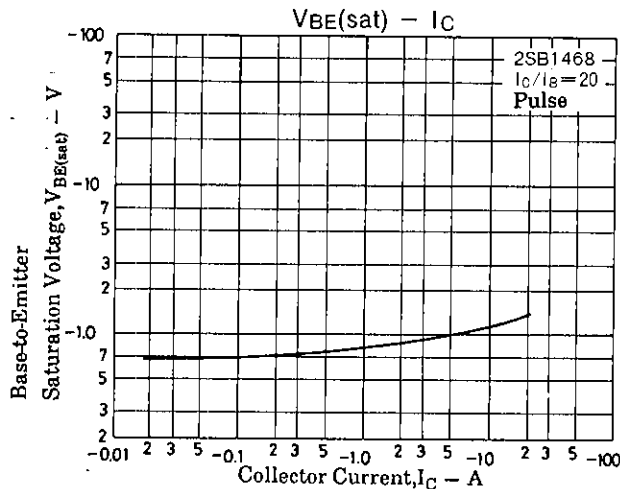
(unit : mm)



SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

9140MH, JK(KOTO) No.3364-1/3





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