

	No.3364	<h2 style="margin: 0;">2SB1468/2SD2219</h2> <p style="margin: 0;">PNP/NPN Epitaxial Planar Silicon Transistors</p> <p style="margin: 0;">30V/8A High-Speed Switching Applications</p>
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Applications

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

Features

- Micaless package facilitating mounting
- Low collector-to-emitter saturation voltage : $V_{CE(sat)} = -0.5V(\text{PNP}), 0.4V(\text{NPN})$ 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
		150	$^\circ\text{C}$
Junction Temperature	T_j	-55 to +150	$^\circ\text{C}$
Storage Temperature	T_{stg}		

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

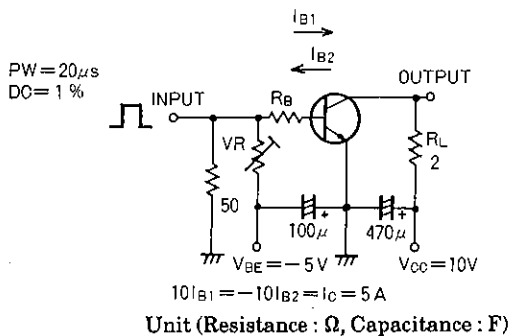
Electrical Characteristics at $T_a = 25^\circ\text{C}$

		min	typ	max
Collector Cutoff Current	I_{CB0} $V_{CB} = (-)40V, I_E = 0$			(-)0.1 mA
Emitter Cutoff Current	I_{EB0} $V_{EB} = (-)4V, I_C = 0$			(-)0.1 mA
DC Current Gain	$h_{FE(1)}$ $V_{CE} = (-)2V, I_C = (-)1A$	70*		280*
	$h_{FE(2)}$ $V_{CE} = (-)2V, I_C = (-)6A$	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 :

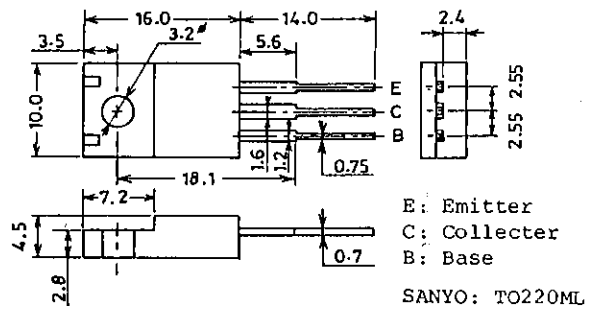
70 Q 140	100 R 200	140 S 280
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Switching Time Test Circuit

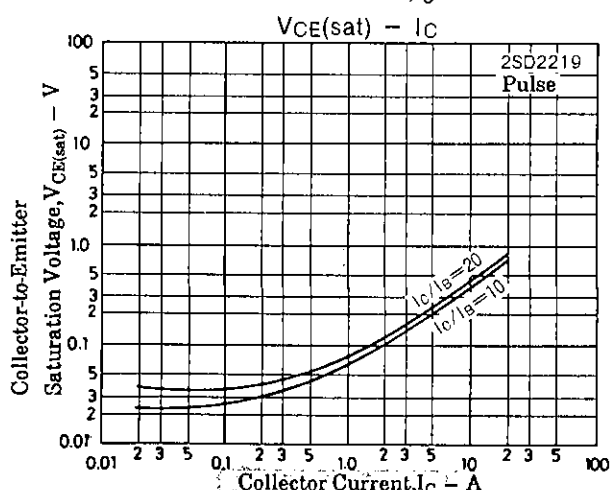
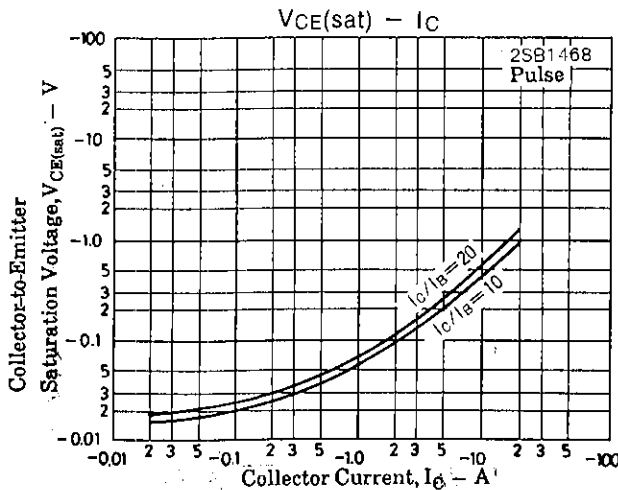
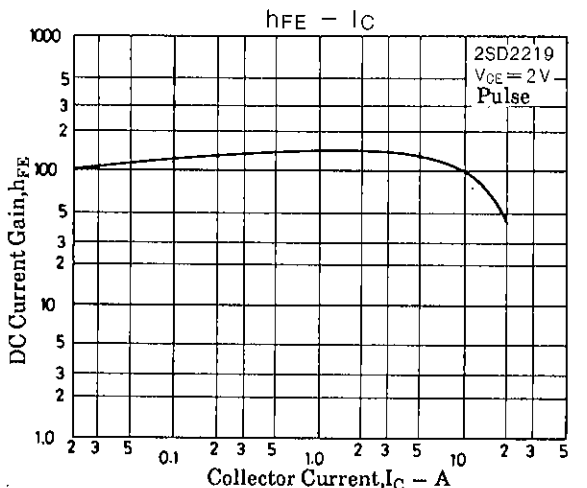
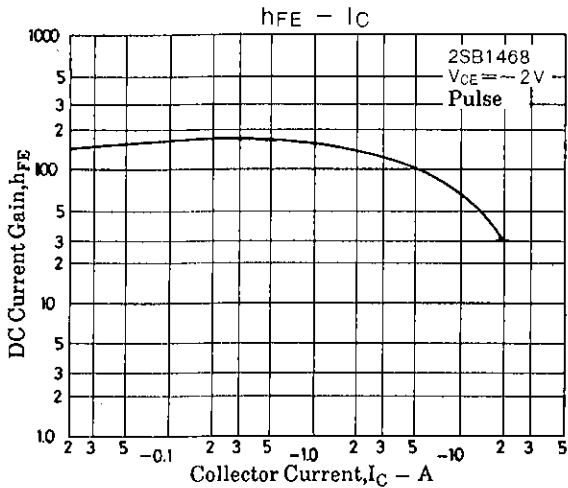
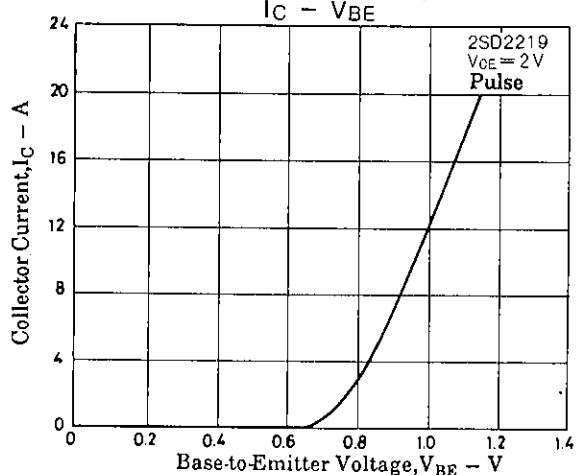
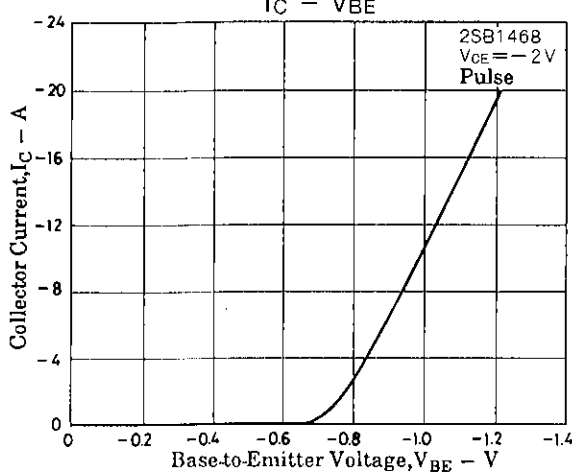
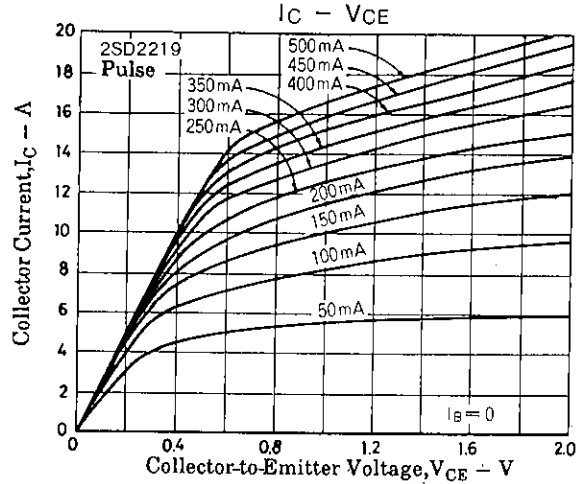
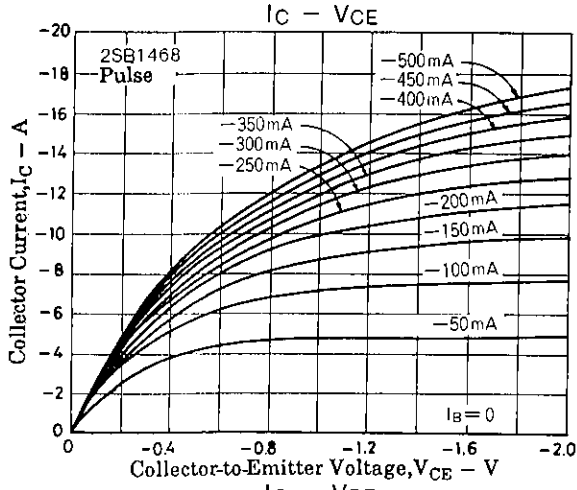


Package Dimensions 2041

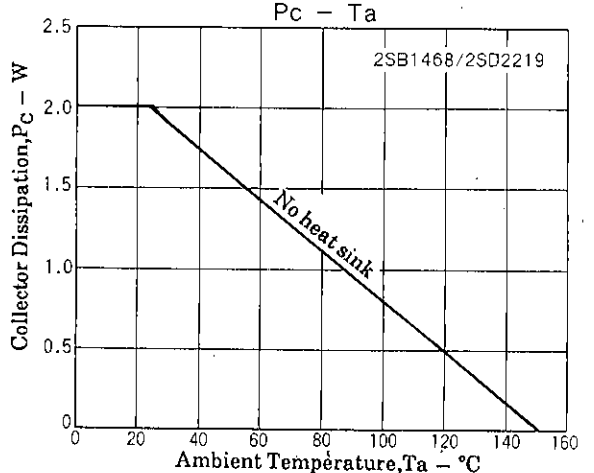
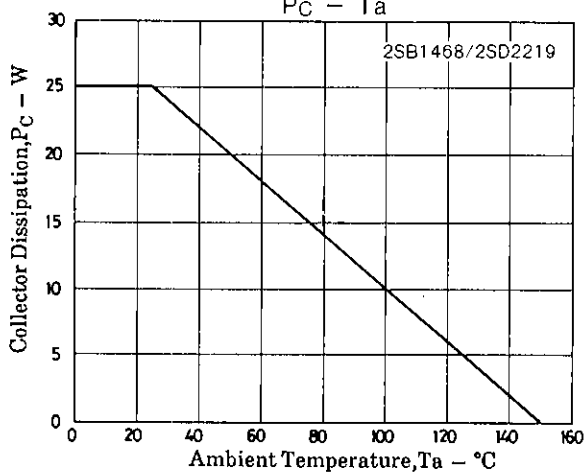
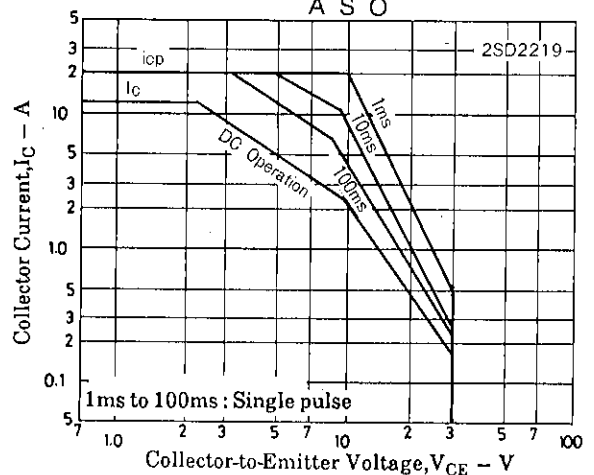
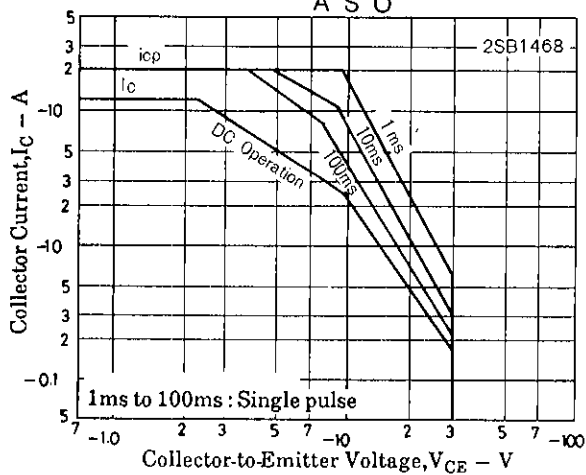
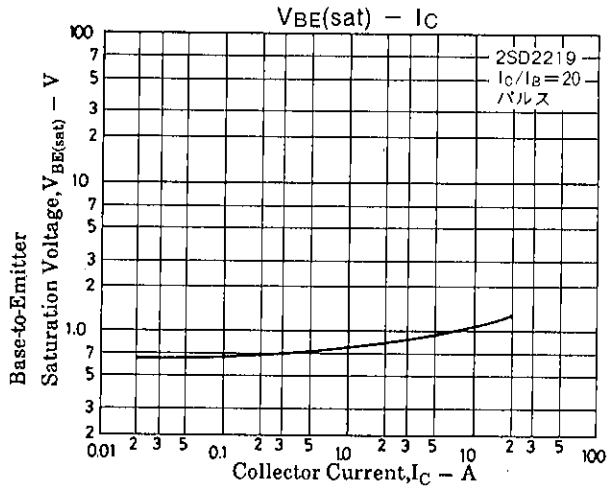
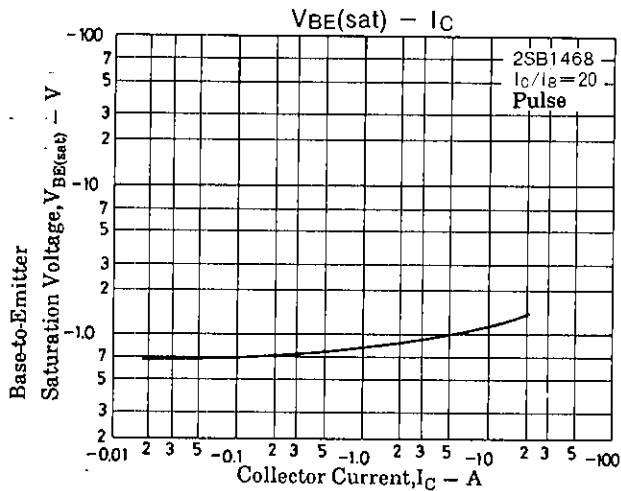
(unit : mm)



2SB1468/2SD2219



2SB1468/2SD2219



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