

SANYO	No.1796B	2SB920L/2SD1236L
		PNP/NPN Epitaxial Planar Silicon Transistors 80V/5A Switching Applications

Applications

Relay drivers, high-speed inverters, converters, and other general high-current switching applications.

Features

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

() : 2SB920L

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

			unit
Collector-to-Base Voltage	V_{CB0}	(-)90	V
Collector-to-Emitter Voltage	V_{CE0}	(-)80	V
Emitter-to-Base Voltage	V_{EB0}	(-)6	V
Collector Current	I_C	(-)5	A
Collector Current (Pulse)	I_{CP}	(-)9	A
Collector Dissipation	P_C	1.75	W
		30	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

$T_c = 25^\circ C$

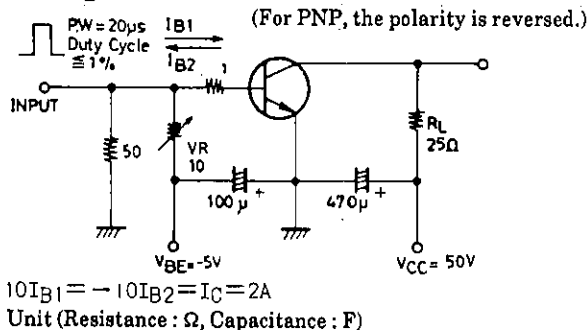
Electrical Characteristics at $T_a = 25^\circ C$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)80V, I_E = 0$			(-)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*	
	$h_{FE(2)}$	$V_{CE} = (-)2V, I_C = (-)3A$	30			
Gain Bandwidth Product	f_T	$V_{CE} = (-)5V, I_C = (-)1A$		20		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)3A, I_B = (-)0.3A$			0.4	V
					(-0.5)	
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)1mA, I_E = 0$	(-)90			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = \infty$	(-)80			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)1mA, I_C = 0$	(-)6			V
Rise Time	t_{on}	See specified Test Circuit.	(0.2)0.1			μs
Storage Time	t_{stg}	"	(0.7)1.2			μs
Fall Time	t_f	"	(0.2)0.4			μs

* : The 2SB920L/2SD1236L are classified by 1A h_{FE} as follows :

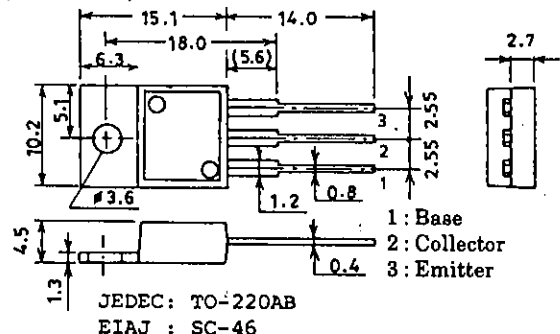
70 Q 140	100 R 200	140 S 280
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Switching Time Test Circuit



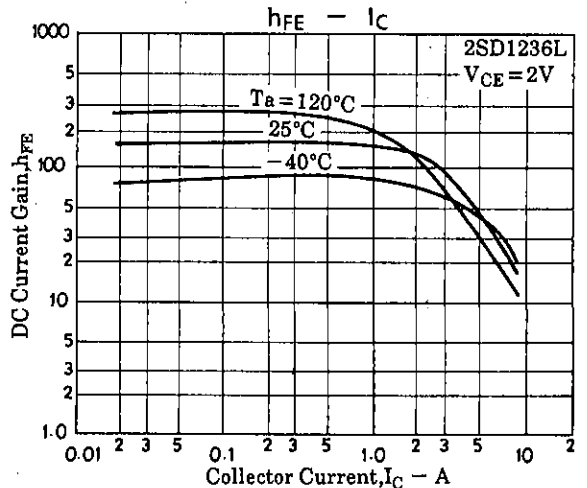
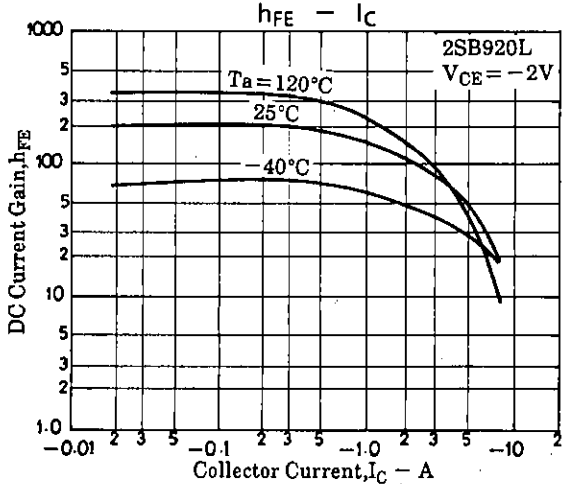
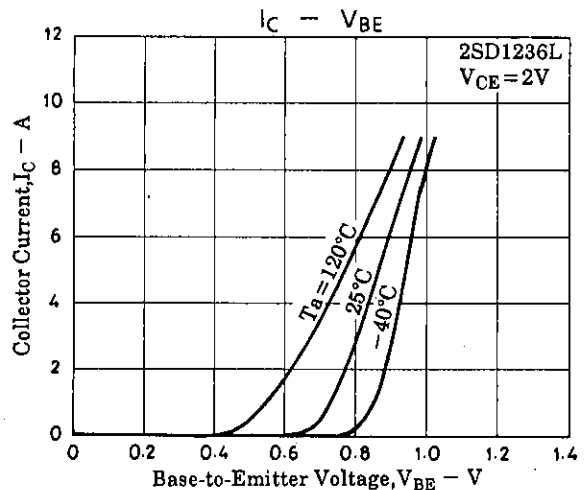
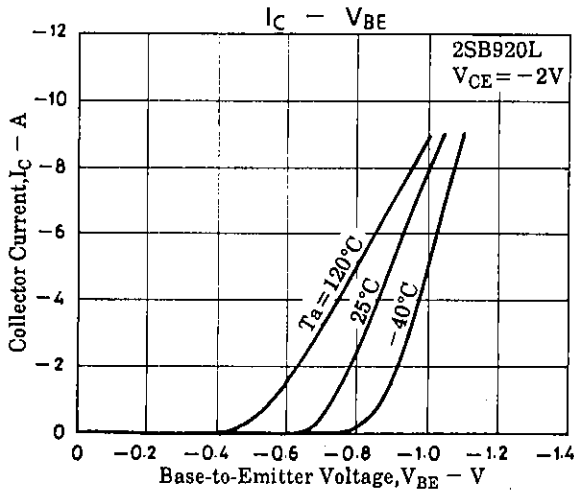
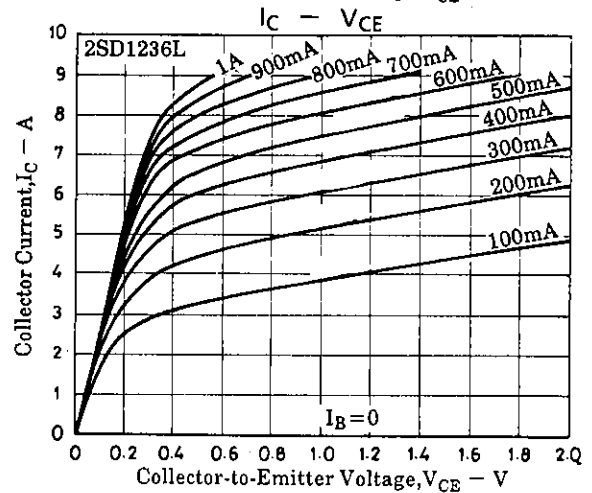
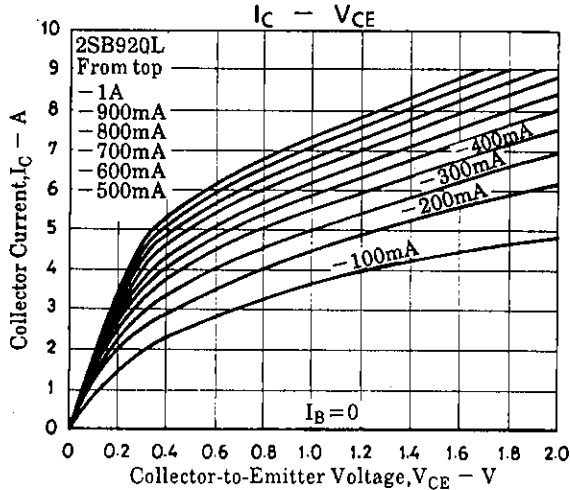
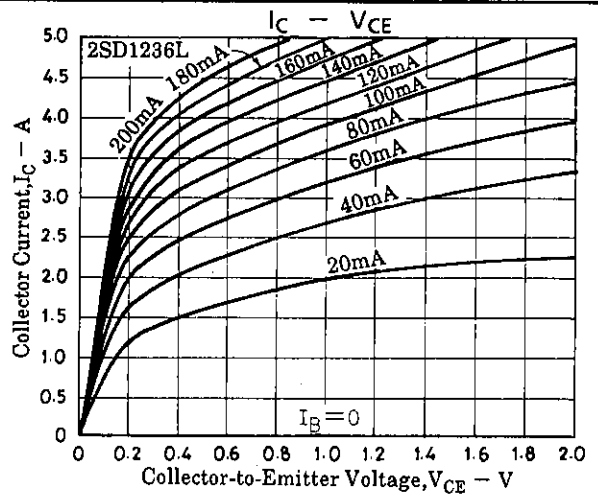
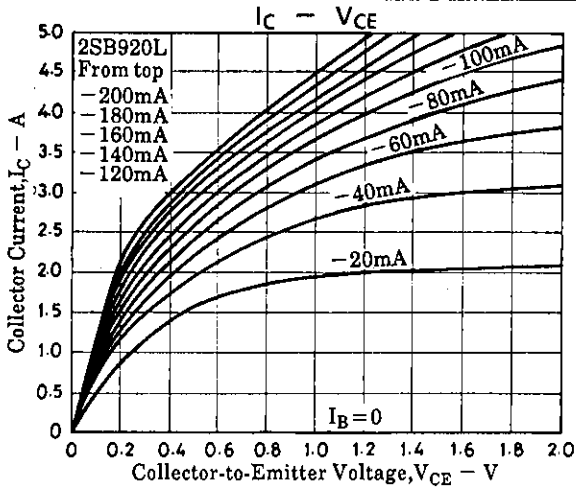
Package Dimensions 2010C

(unit : mm)

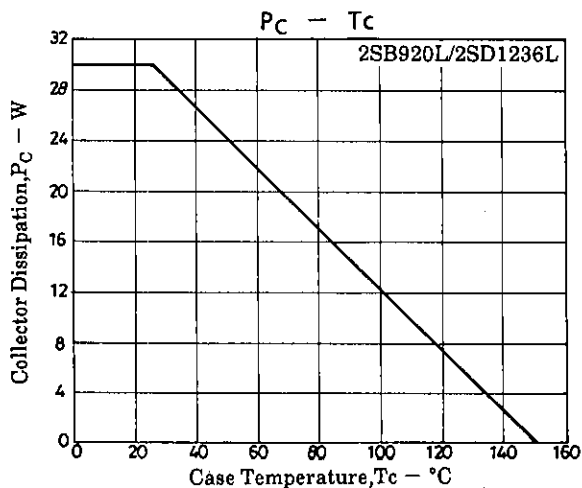
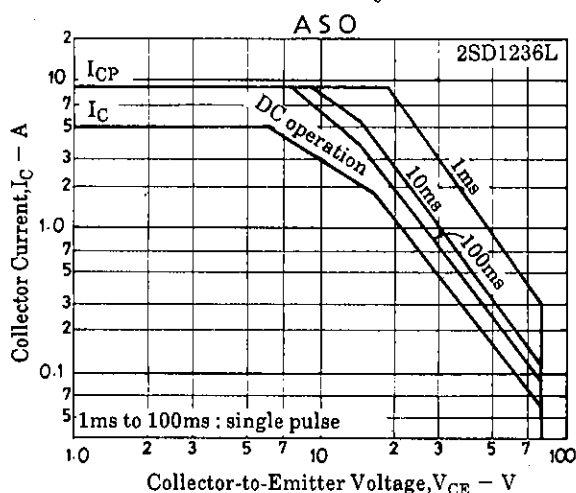
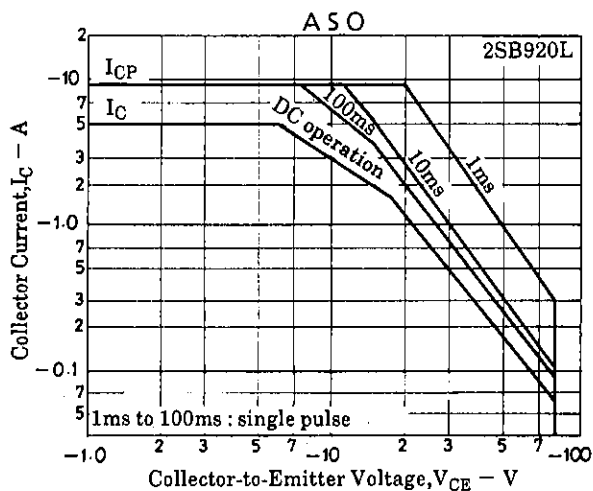
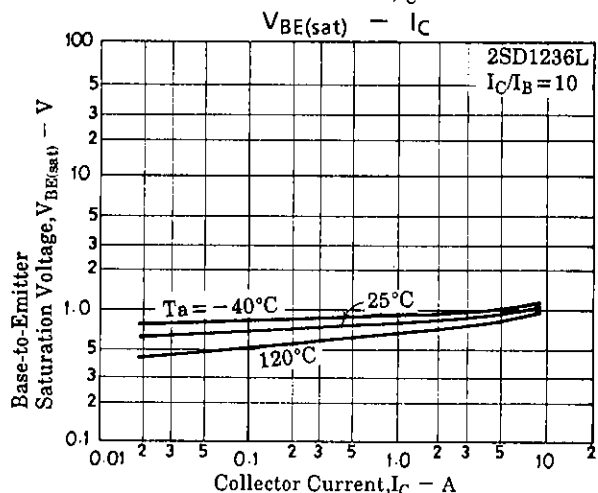
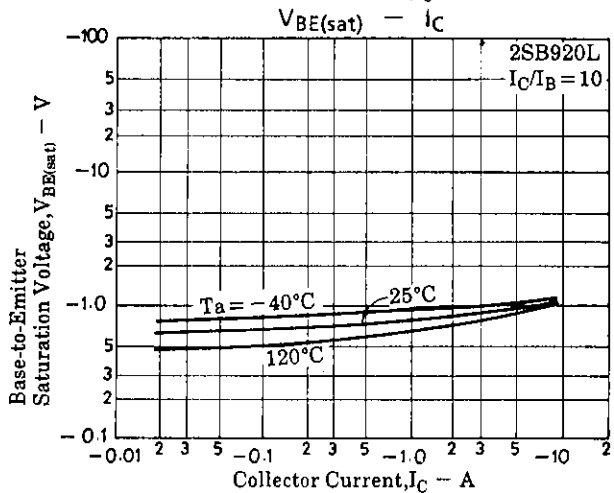
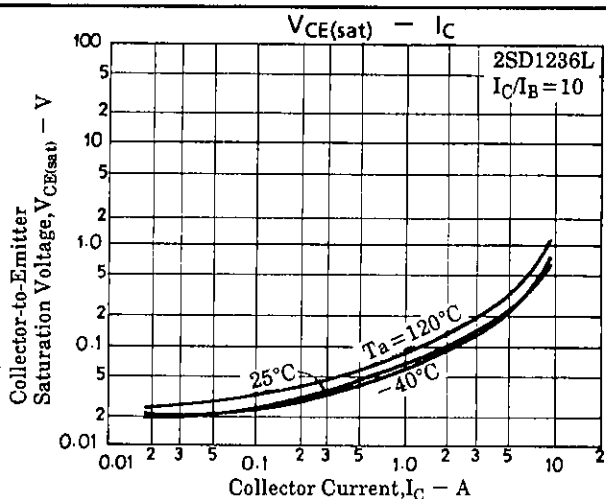
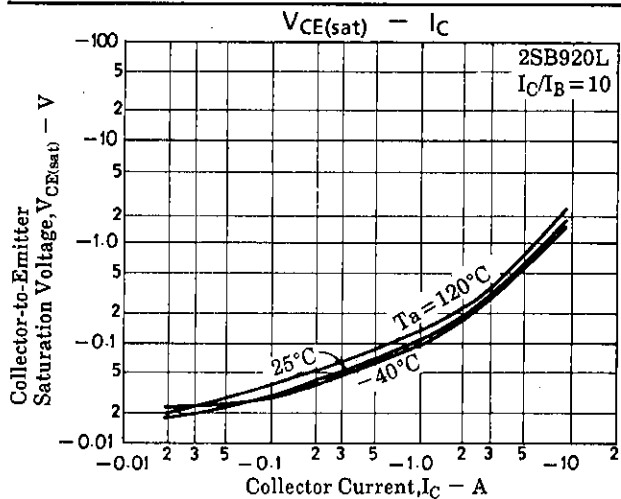


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