



2SA1773/2SC4616

High-Voltage Driver Applications

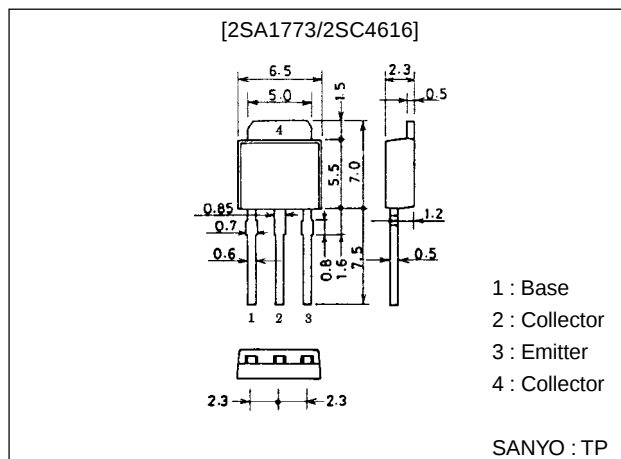
Features

- Large current capacity ($I_C=2A$).
- High breakdown voltage ($V_{CEO} \geq 400V$).

Package Dimensions

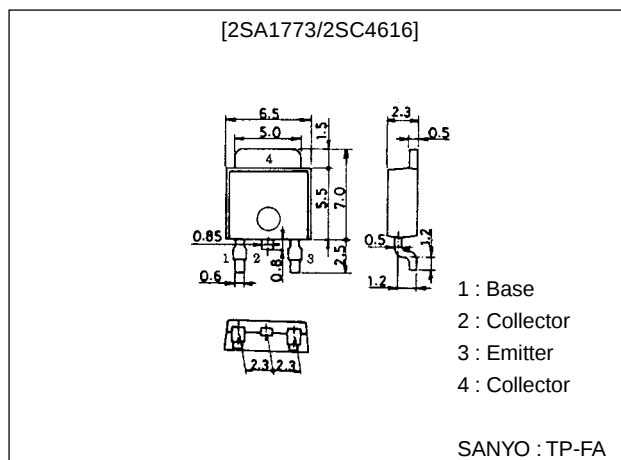
unit:mm

2045A



unit:mm

2044A



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83198HA (KT)/30395TS/12894TH AX-8287/D251MH/5300TA (KOTO) X-6470, 6459 No.3399-1/5

() : 2SA1773

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		(-)400	V
Collector-to-Emitter Voltage	V_{CEO}		(-)400	V
Emitter-to-Base Voltage	V_{EBO}		(-)5	V
Collector Current	I_C		(-)2	A
Collector Current (Pulse)	I_{CP}		(-)4	A
Collector Dissipation	P_C		1	W
		Tc=25°C	15	W
Junction Temperature	T_j		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

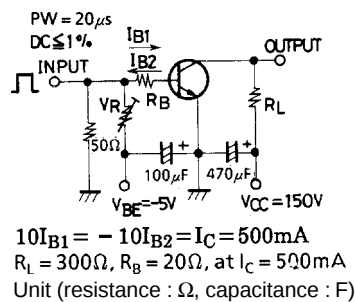
Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)300V, I_E=0$			(-)1.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4V, I_C=0$			(-)1.0	μA
DC Current Gain	h_{FE}	$V_{CE}=(-)10V, I_C=(-)100mA$	40*		200*	
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10V, I_C=(-)100mA$		(40)60		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)30V, f=1MHz$		(25)15		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$			(-)1.0	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$			(-)1.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10μA, I_E=0$	(-)400			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=∞$	(-)400			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10μA, I_C=0$	(-)5			V
Turn-ON Time	t_{on}	See specified Test Circuit		(0.12)		μs
				0.085		μs
Storage Time	t_{stg}	See specified Test Circuit		(3.0)		μs
				4.0		μs
Fall Time	t_f	See specified Test Circuit		(0.3)		ns
				0.6		μs

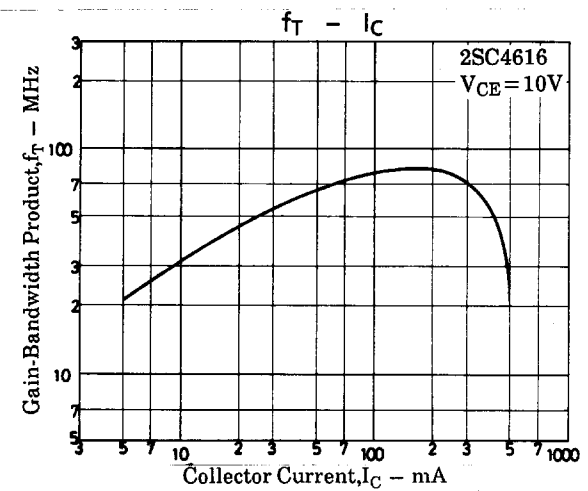
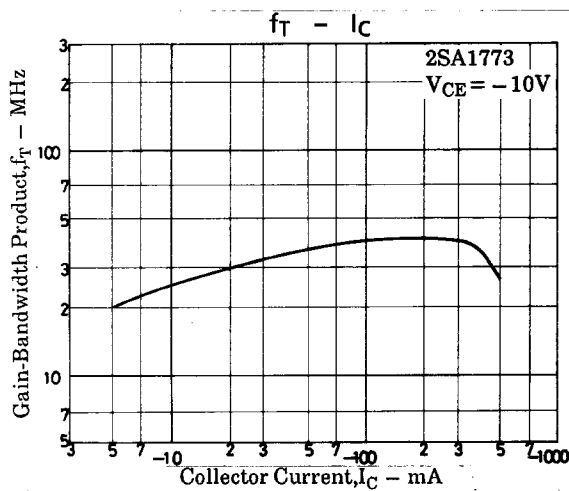
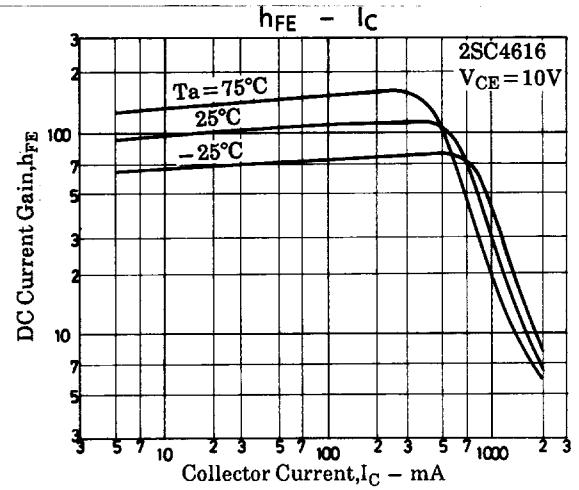
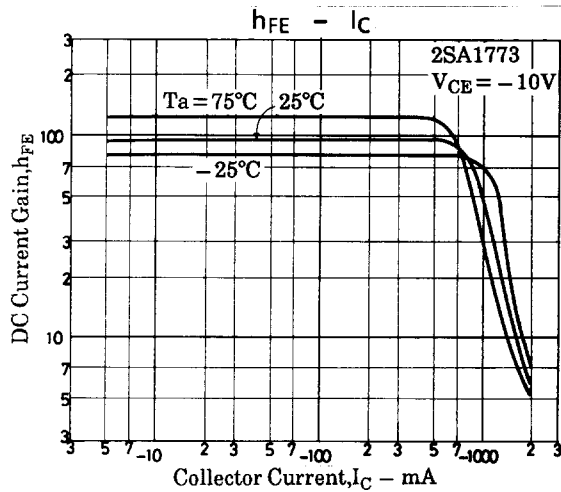
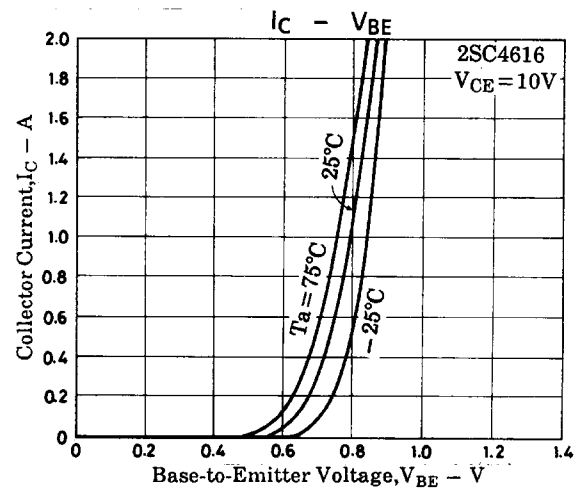
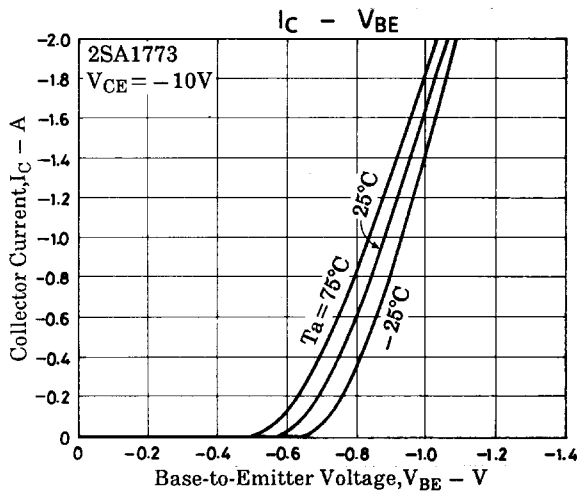
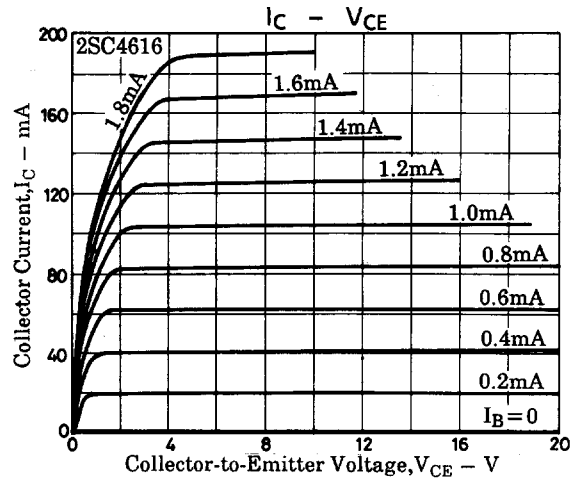
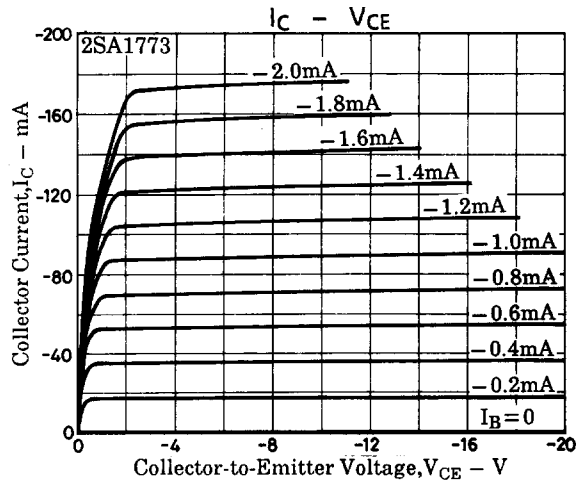
* : The 2SA1773/2SC4616 are classified by 100mA h_{FE} as follows :

40	C	80	60	D	120	100	E	200
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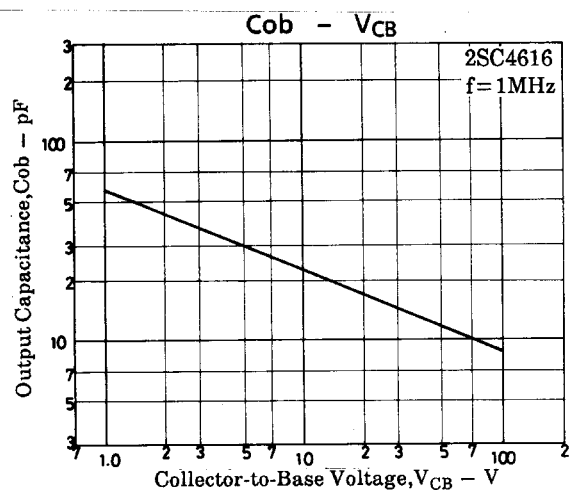
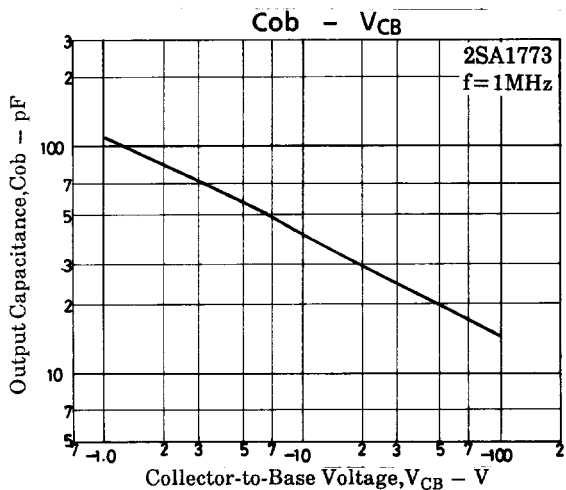
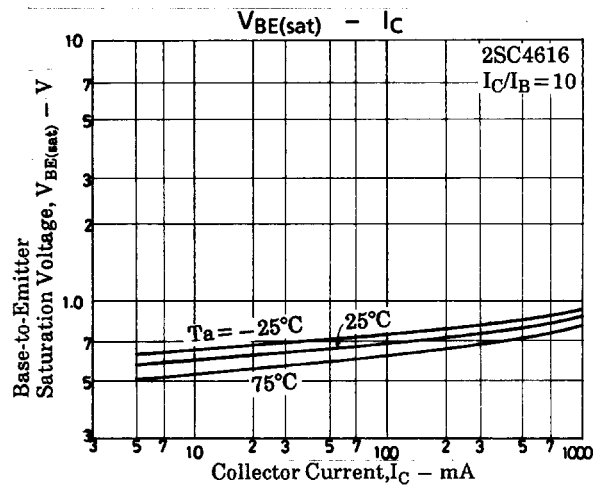
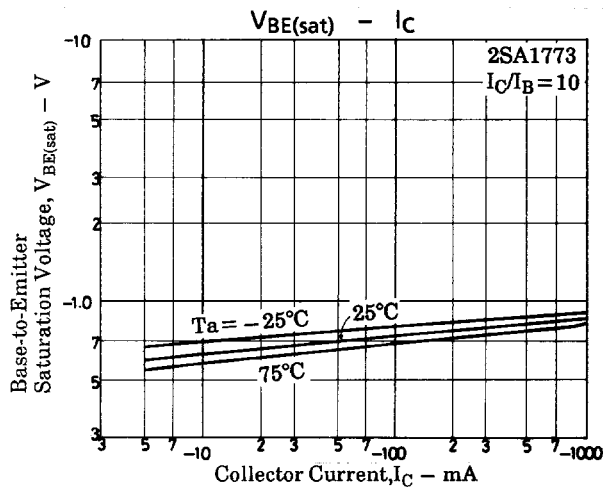
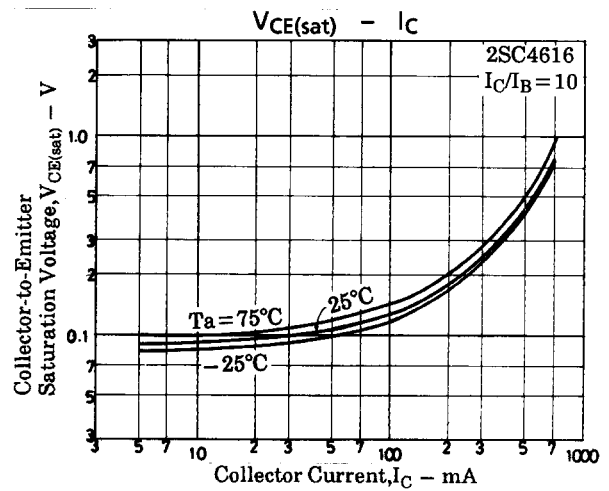
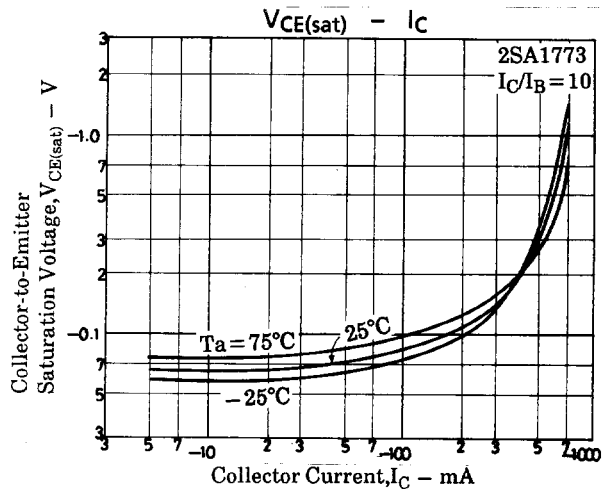
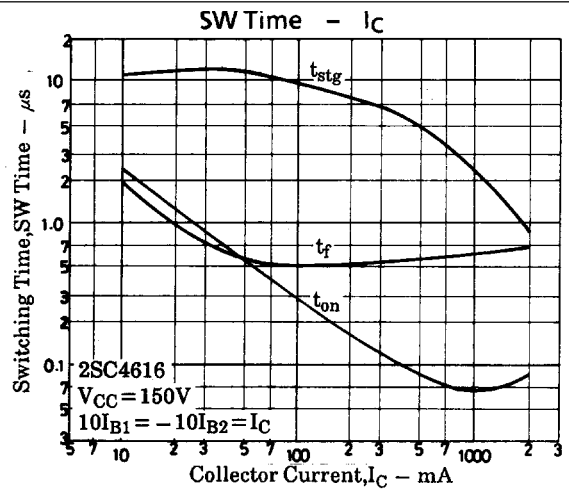
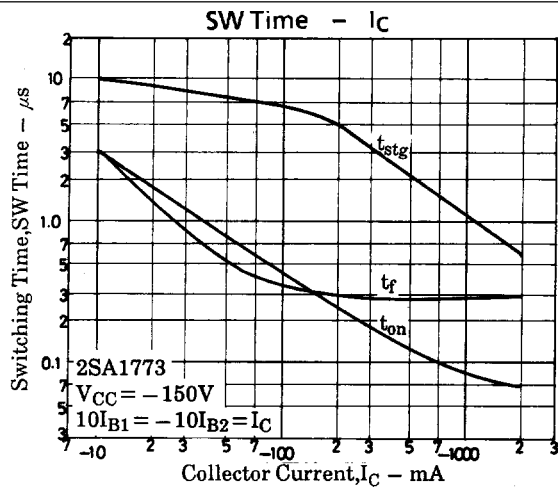
Switching Time Test Circuit



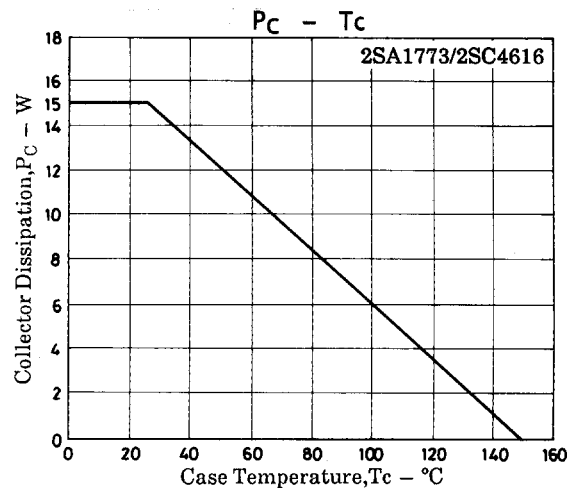
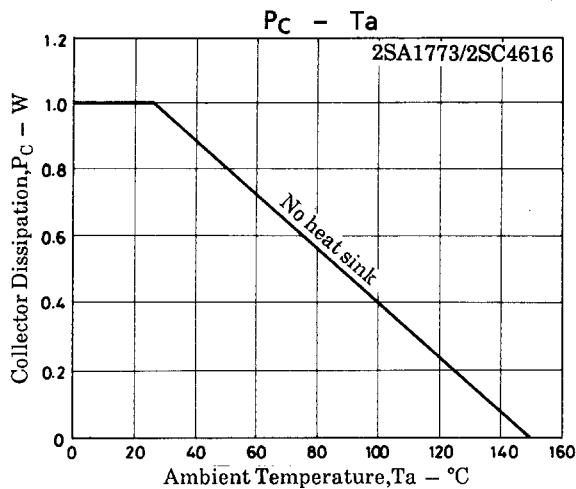
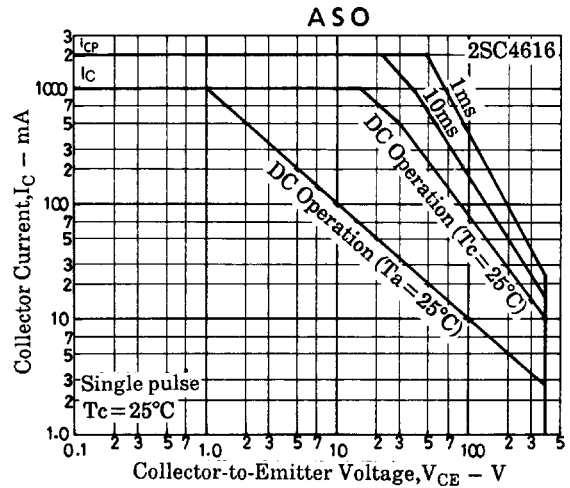
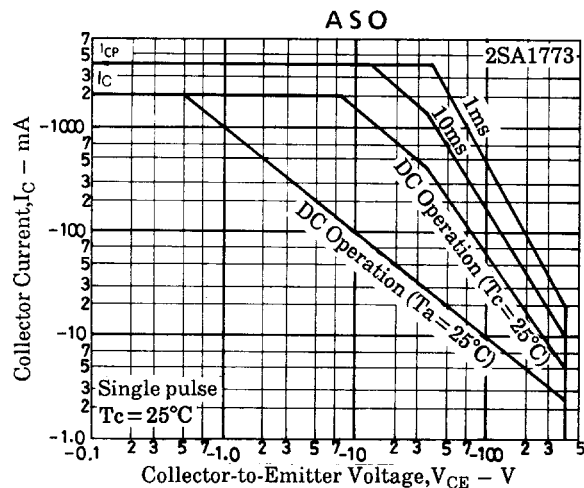
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