

2SA1415 / 2SC3645

Electrical Characteristics at Ta=25°C

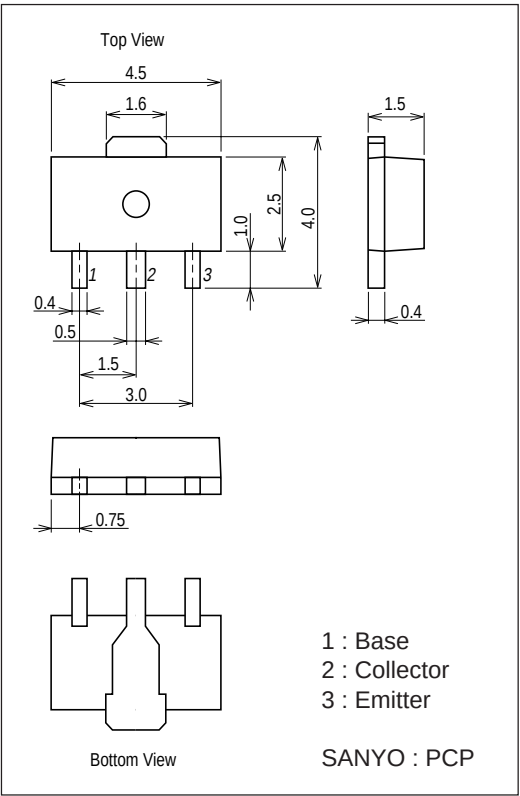
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)80V, I_E=0A$			$(-)100$	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4V, I_C=0A$			$(-)100$	nA
DC Current Gain	h_{FE}	$V_{CE}=(-)5V, I_C=(-)10mA$	140*		400*	
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10V, I_C=(-)10mA$		150		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		(4.0)3.0		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)50mA, I_B=(-)5mA$		$(-0.14)0.07$	$(-0.4)0.3$	V
Turn-ON Time	t_{on}	See sepcified Test Circuit.		0.1		μs
Strage Time	t_{stg}	See sepcified Test Circuit.		1.5		μs
Fall Time	t_f	See sepcified Test Circuit.		0.1		μs

* : The 2SA1415/2SC3645 are classified by 10mA h_{FE} as follows :

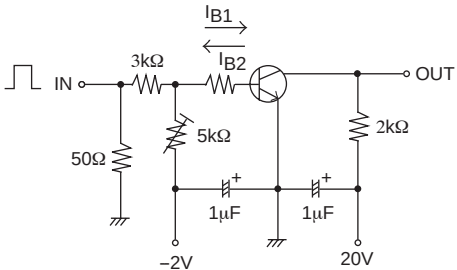
Rank	S	T
h_{FE}	140 to 280	200 to 400

Package Dimensions

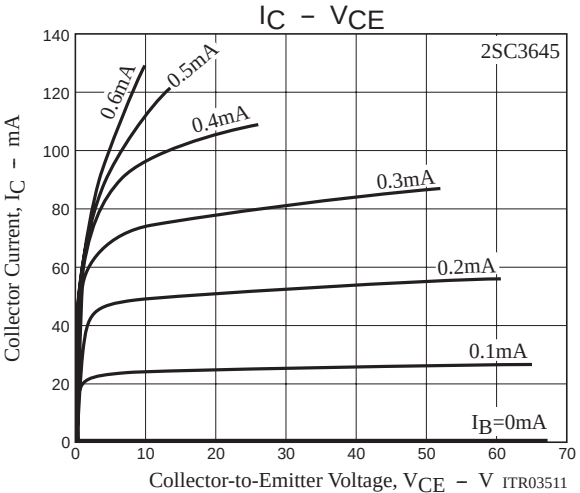
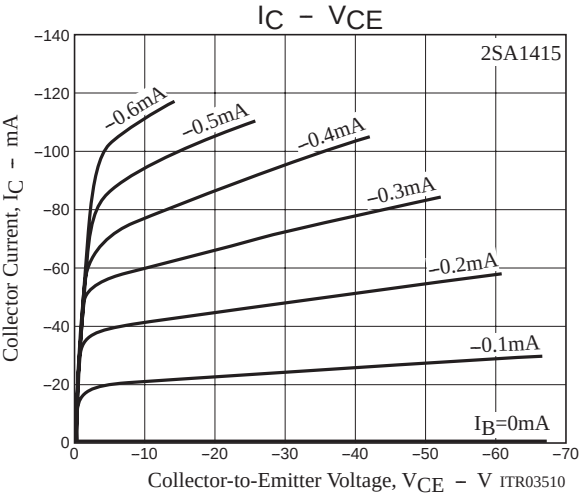
unit : mm (typ)
7007A-004



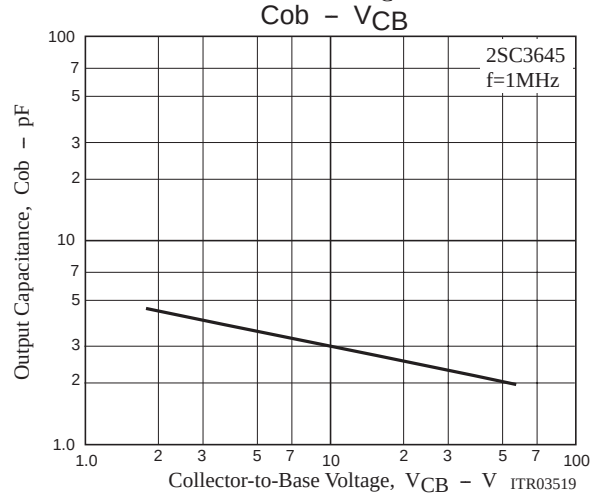
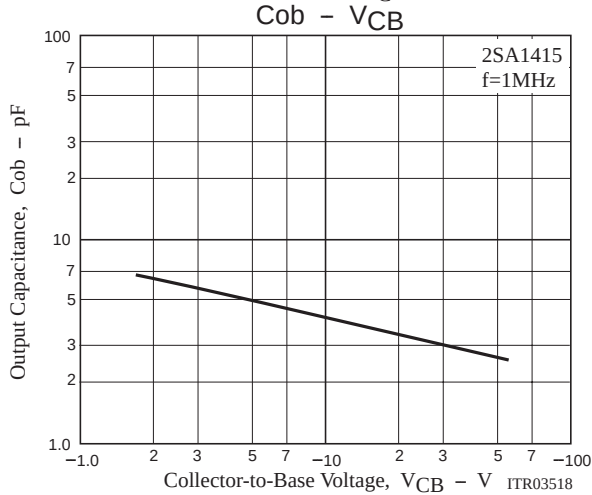
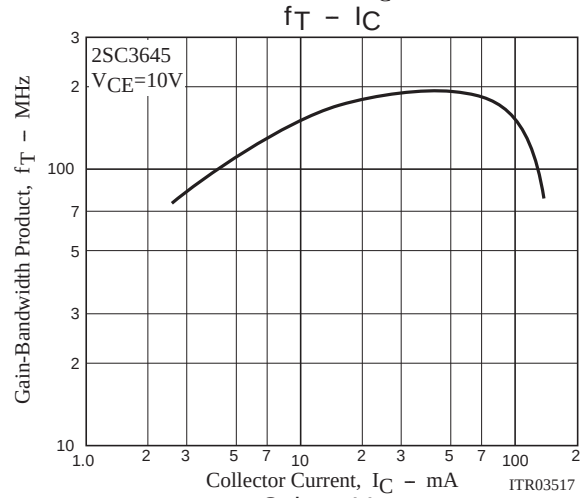
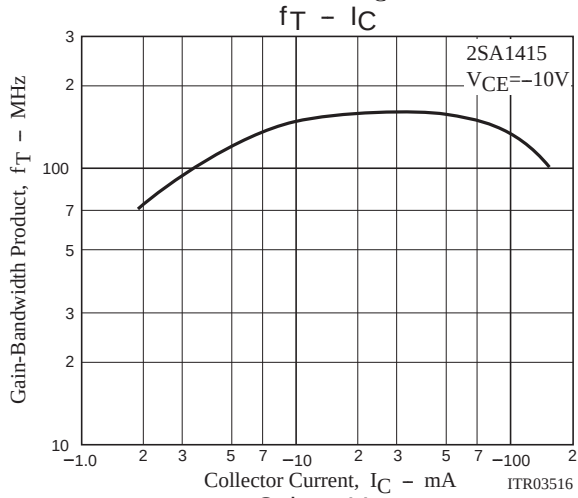
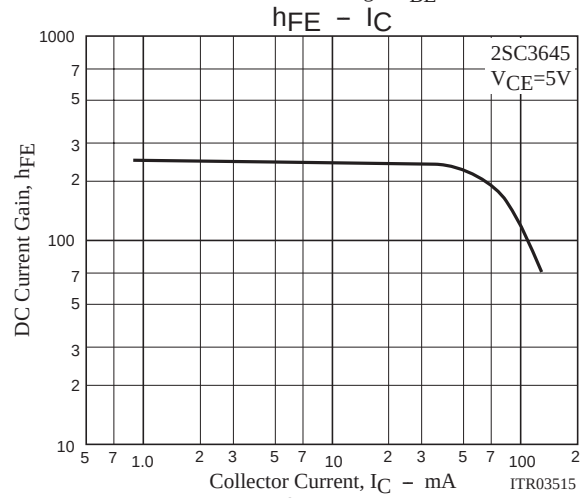
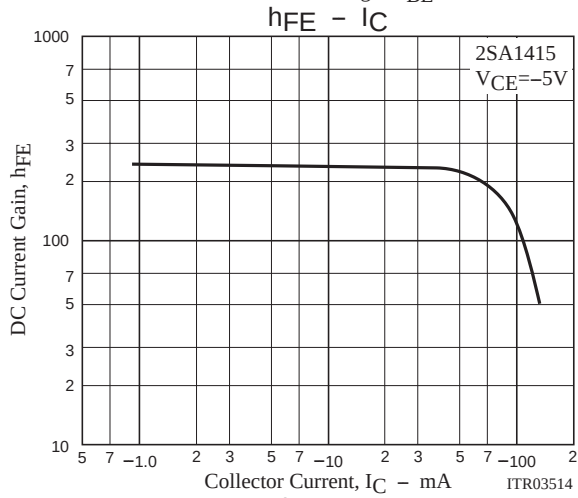
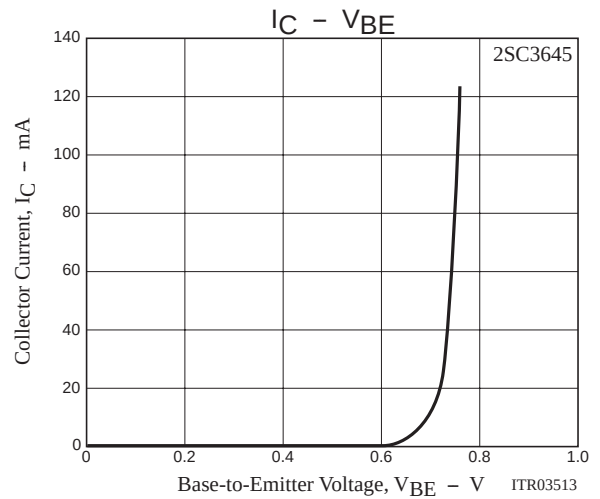
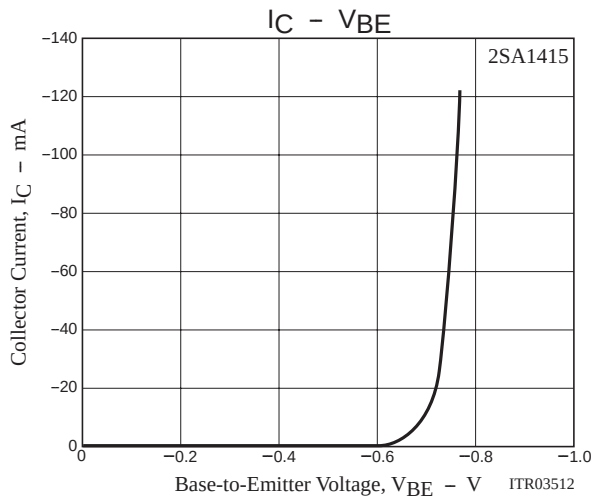
Switching Time Test Circuit

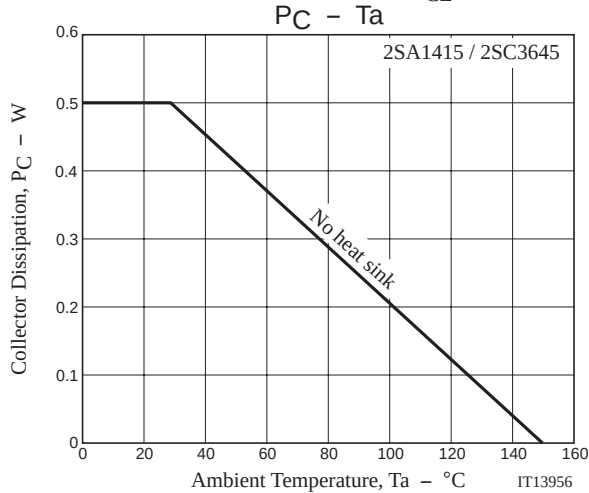
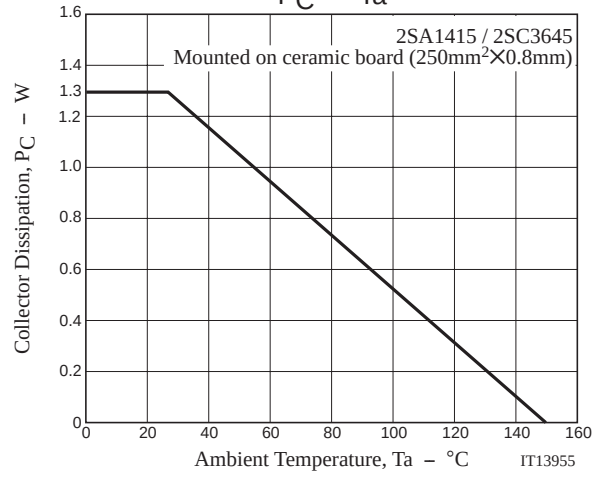
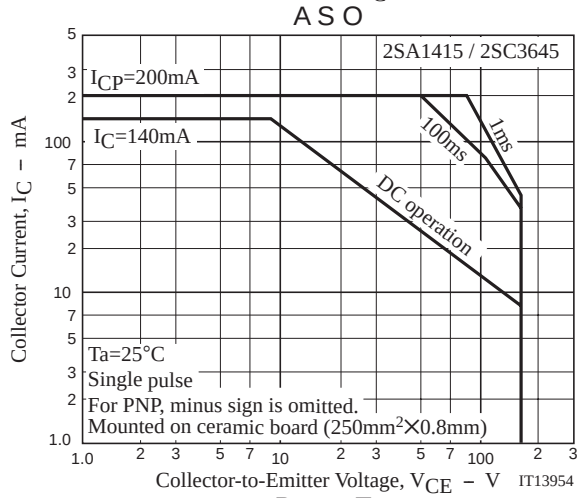
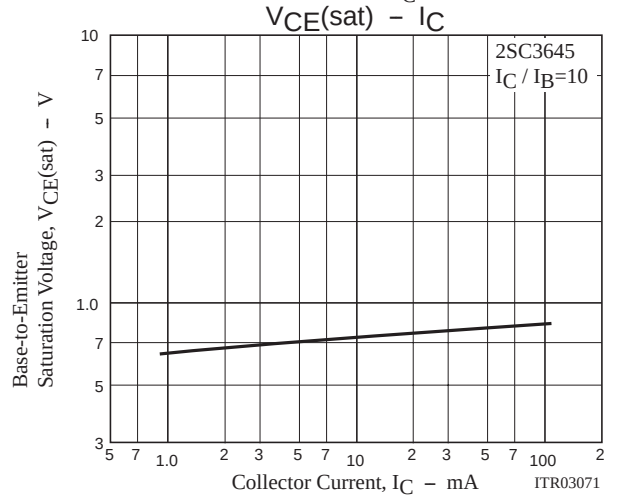
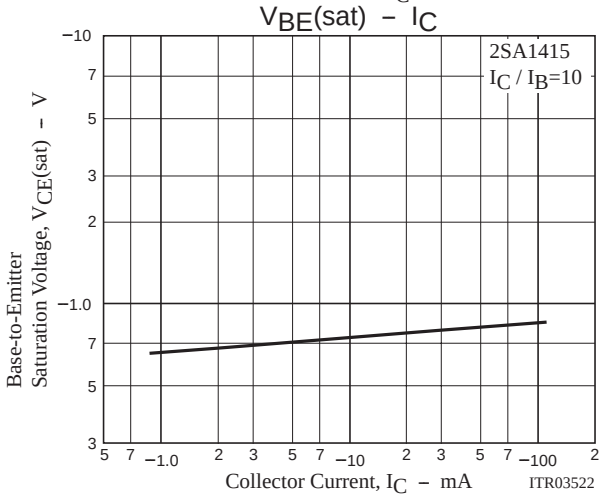
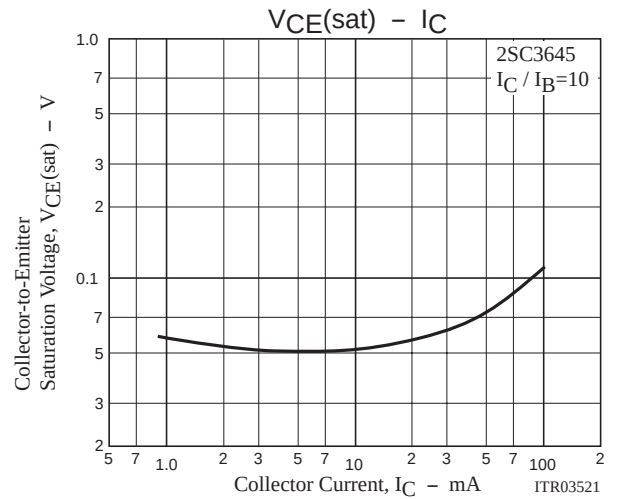
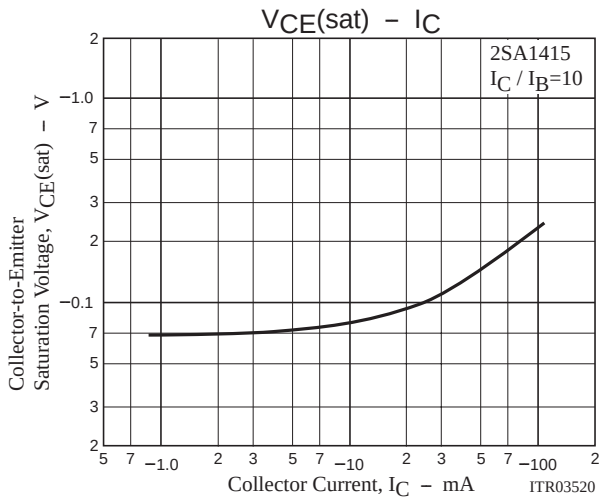


$I_C=10I_{B1}=-10I_{B2}=10mA$
For PNP, the polarity is reversed.



2SA1415 / 2SC3645





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