



# 2SB631, 631K/2SD600, 600K

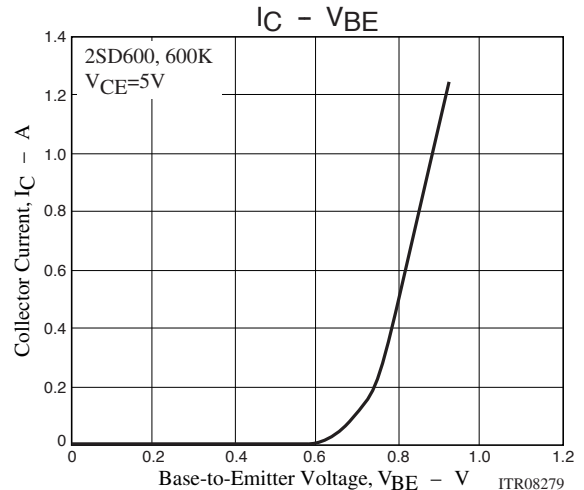
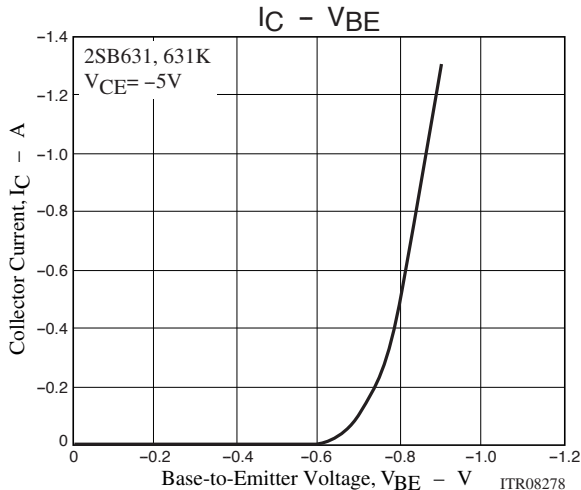
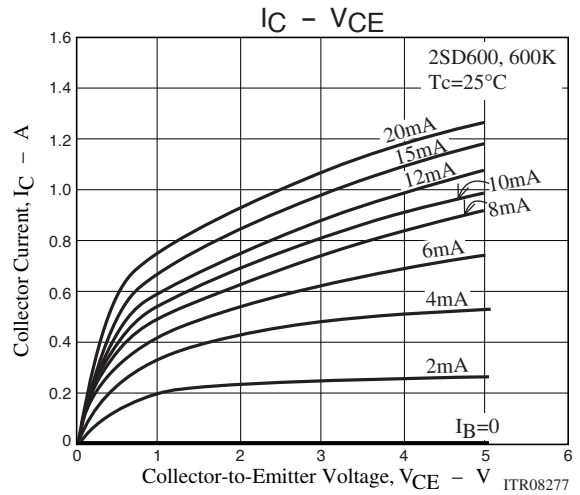
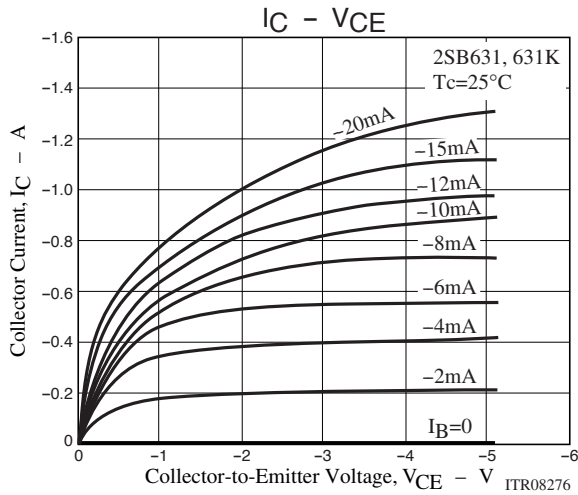
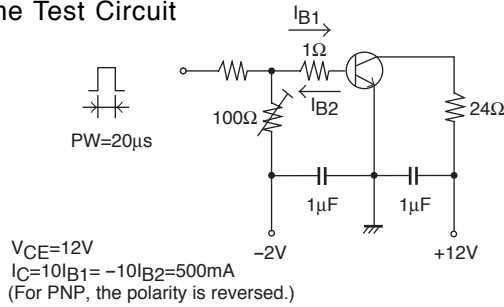
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
DC Current Gain	$h_{FE1}$	$V_{CE}=(-)5V, I_C=(-)50mA$	60*		320*	
	$h_{FE2}$	$V_{CE}=(-)5V, I_C=(-)500mA$	20			
Gain-Bandwidth Product	$f_T$	$V_{CE}=(-)10V, I_C=(-)50mA$		(110) 130		MHz MHz
Output Capacitance	$C_{ob}$	$V_{CB}=(-)10V, f=1MHz$		(30)20		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$		(-)0.15	(-)0.4	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$		(-)0.85	(-)1.2	V
Fall Time	$t_f$	See specified Test Circuit		(80)		ns
				100		ns
Turn-OFF Time	$t_{off}$	See specified Test Circuit		(100)		ns
				500		ns
Storage Time	$t_{stg}$	See specified Test Circuit		(600)		ns
				700		ns

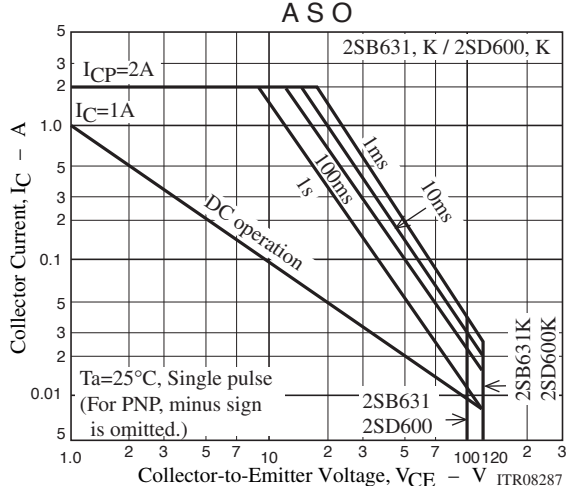
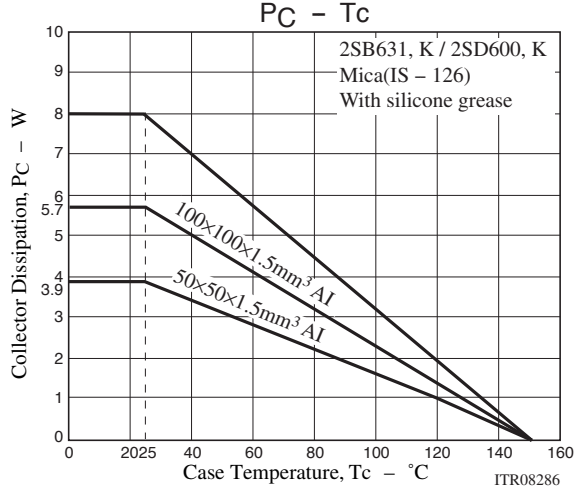
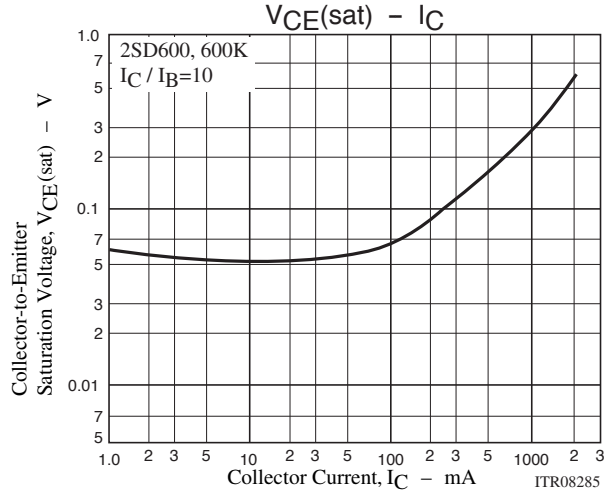
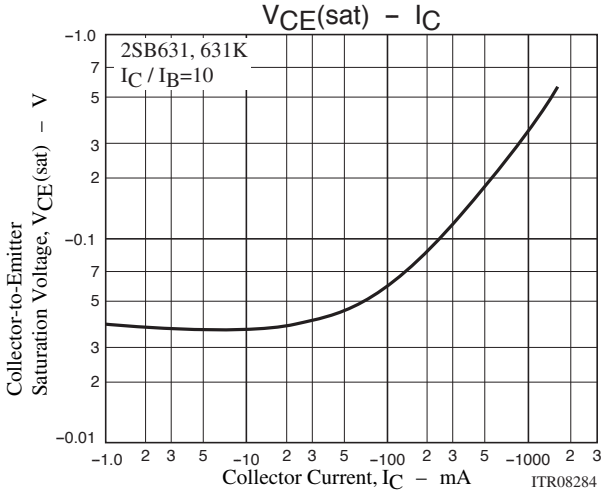
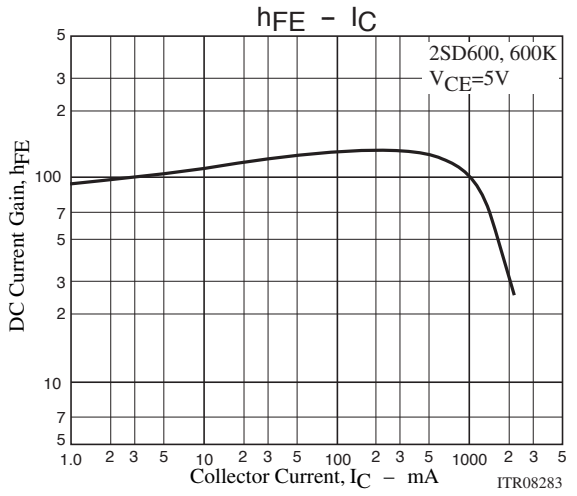
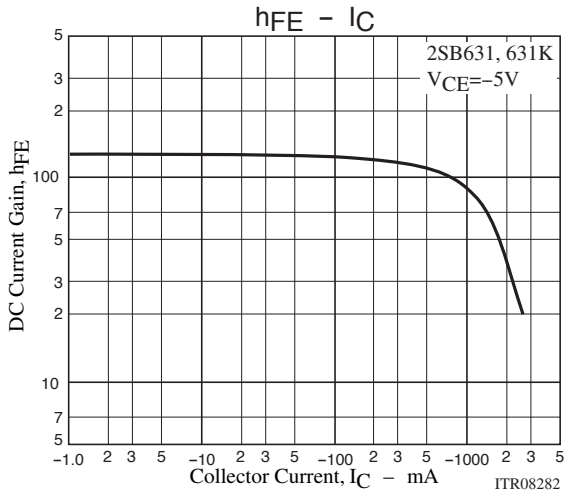
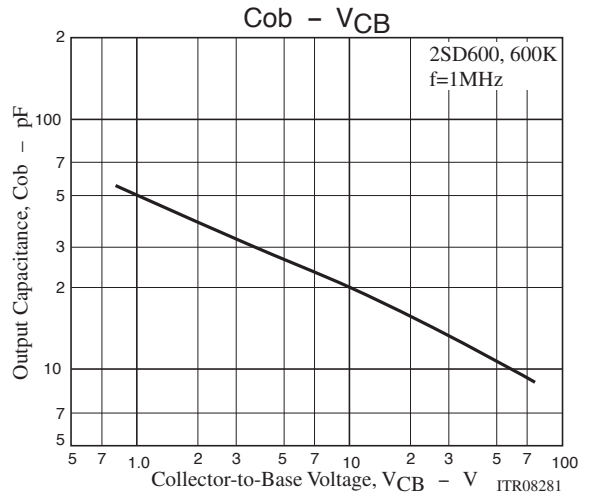
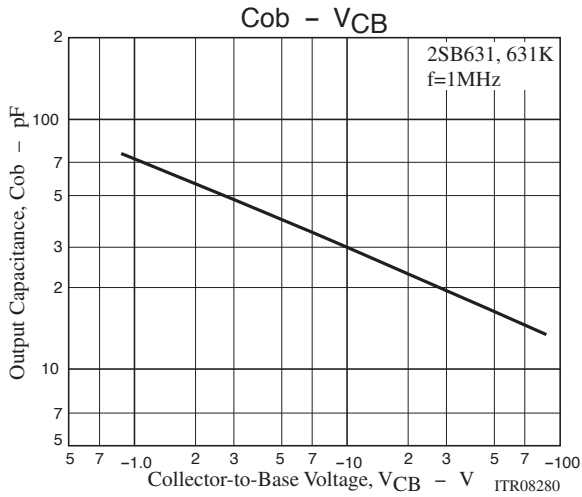
\* : The 2SB631/2SD600 are classified by 50mA  $h_{FE}$  as follows :

Rank	D	E	F
$h_{FE}$	60 to 120	100 to 200	160 to 320

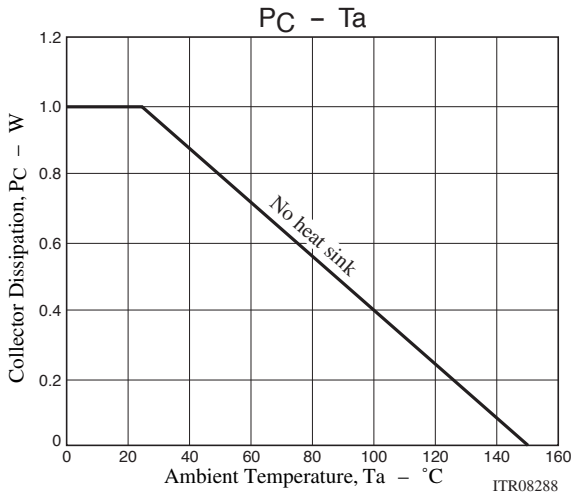
## Switching Time Test Circuit



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