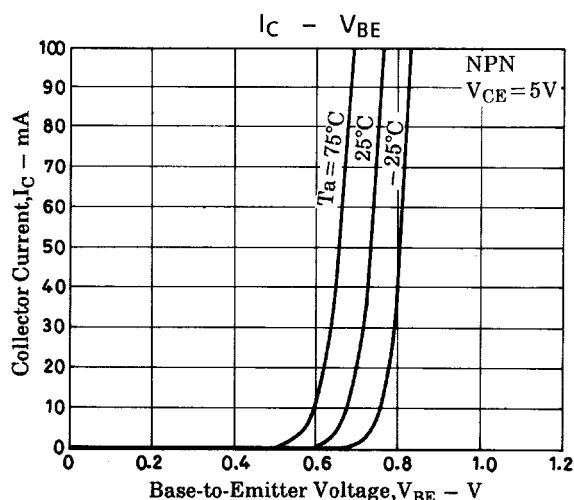
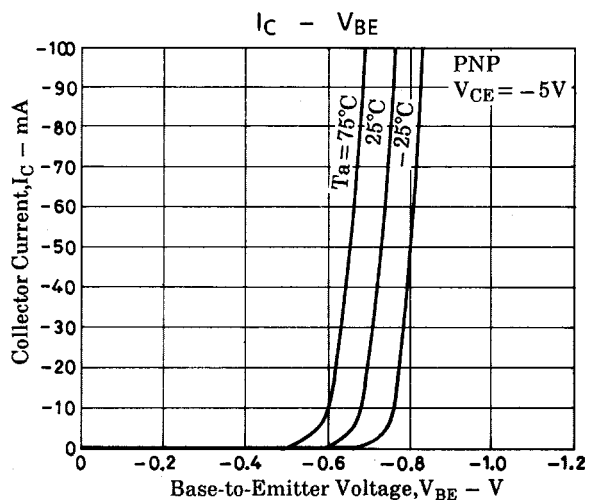
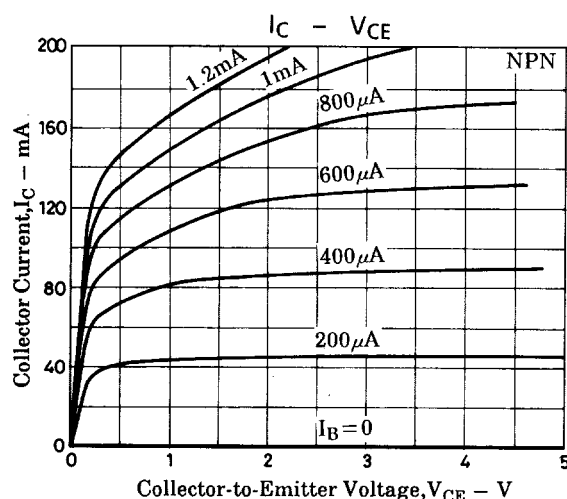
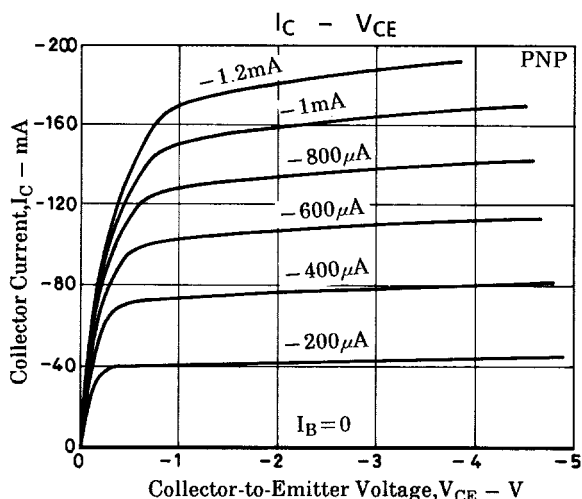


FP202

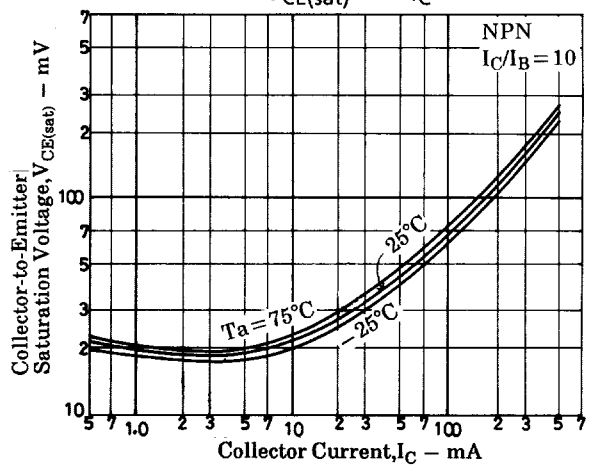
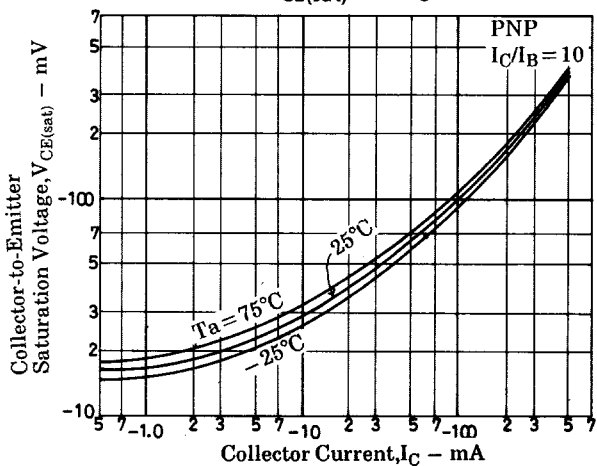
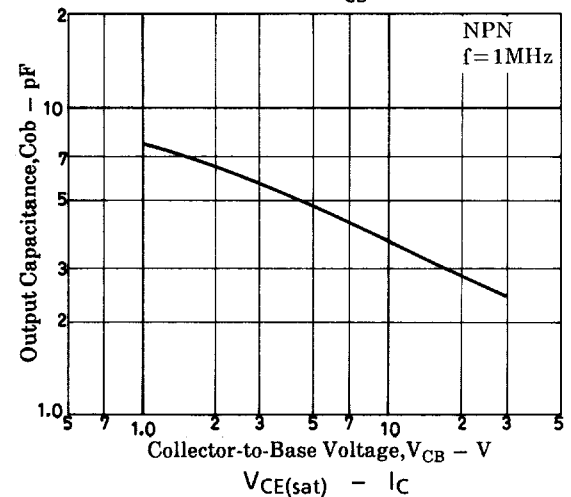
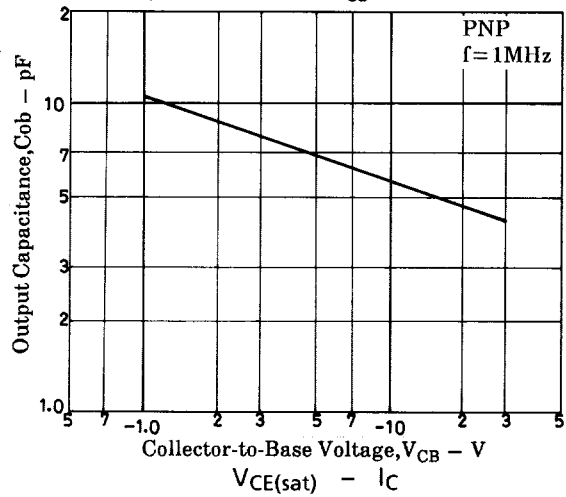
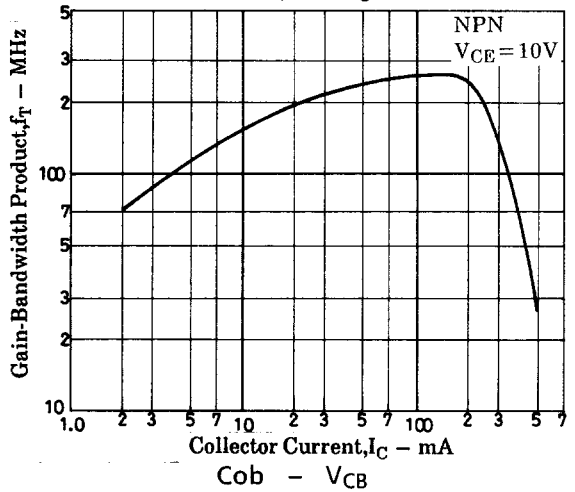
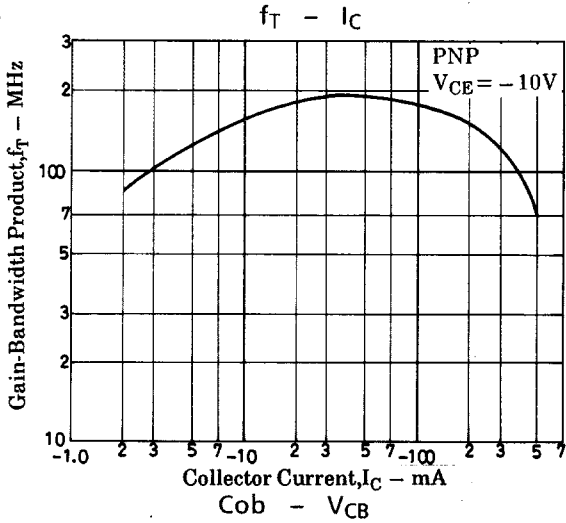
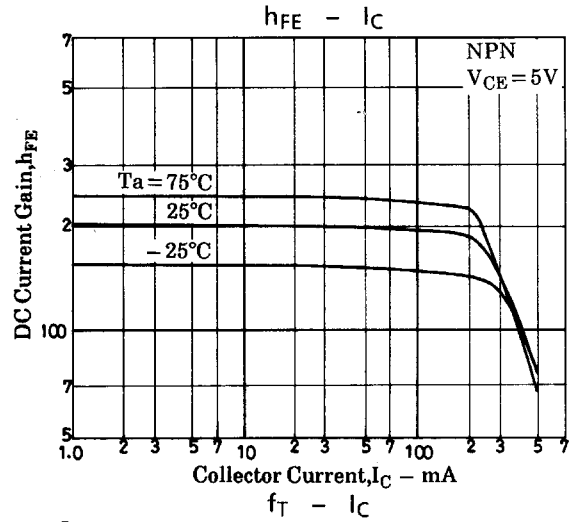
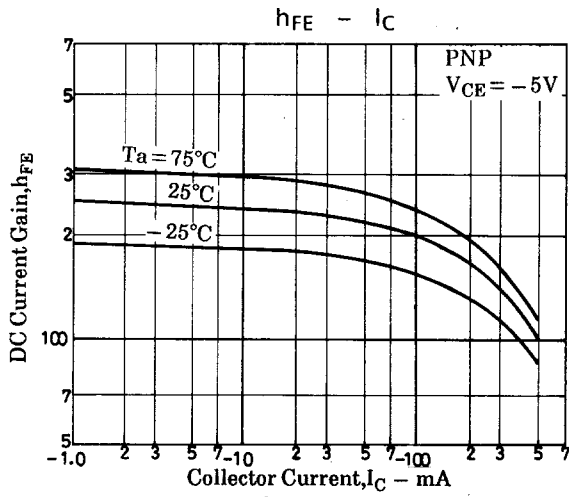
Continued from preceding page.

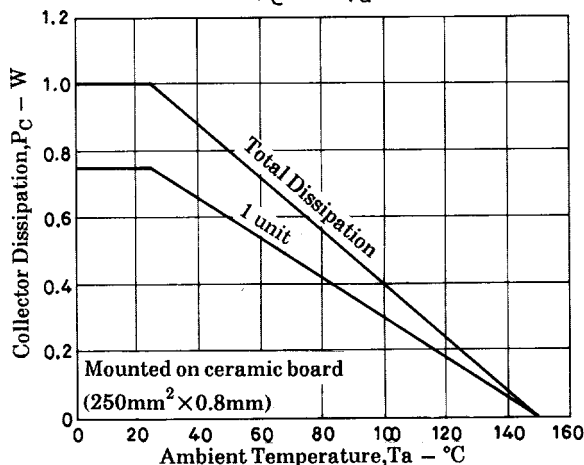
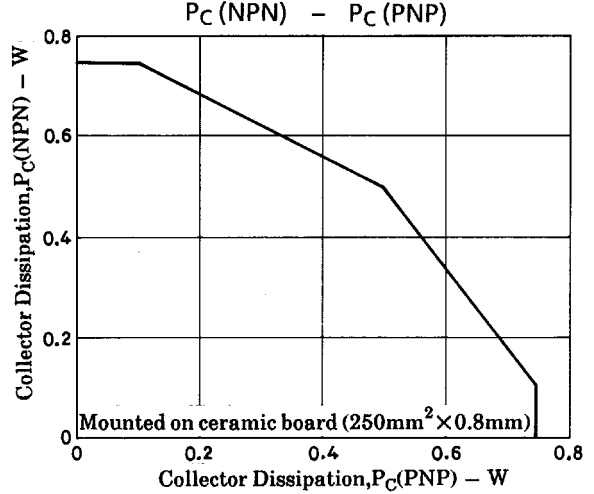
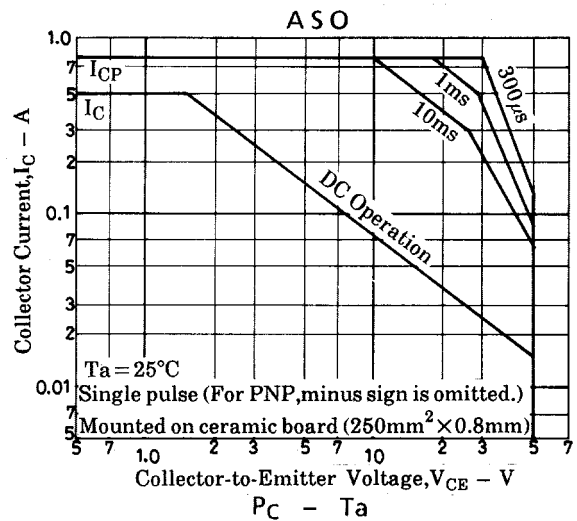
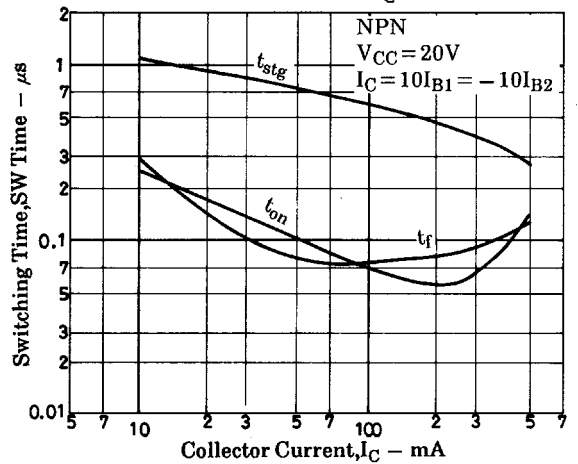
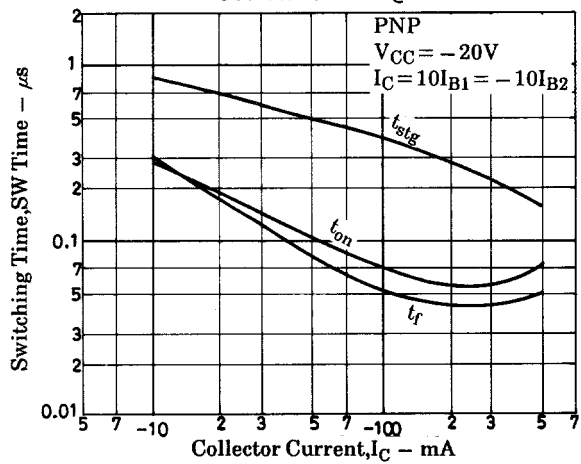
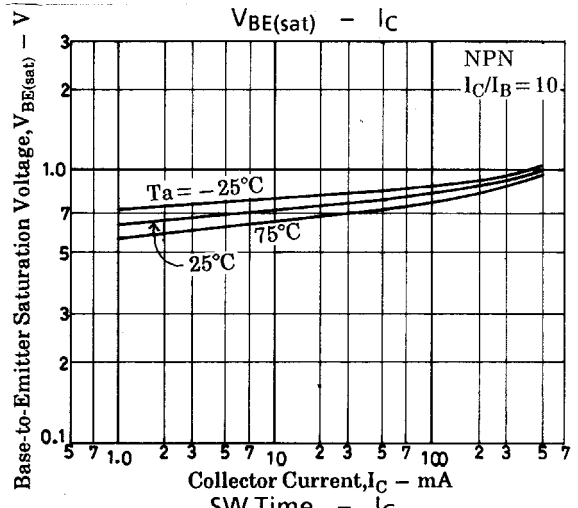
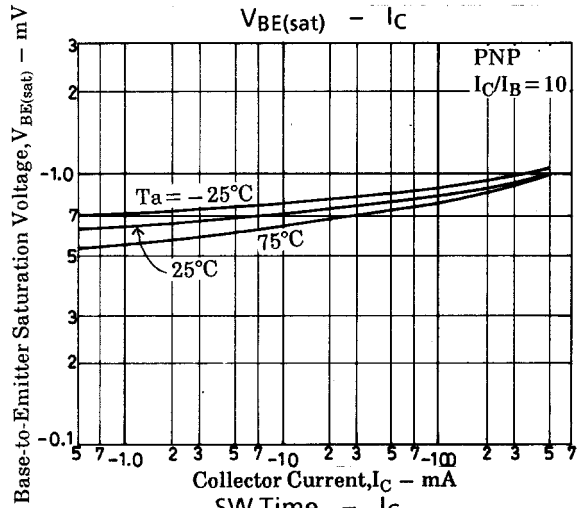
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit	
			min	typ	max		
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)40V, I_E=0$			(-100)	nA	
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4V, I_C=0$			(-100)	nA	
DC Current Gain	h_{FE}	$V_{CE}=(-)5V, I_C=(-)10mA$	140		400		
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10V, I_C=(-)50mA$		(200)		MHz	
					250		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		(5.6)		pF	
					3.7		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)100mA, I_B=(-)10mA$		(-100)	(-300)	mV	
				70	200	mV	
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)100mA, I_B=(-)10mA$		(-0.8)	(-1.2)	V	
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$	(-60)			V	
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)100\mu A, R_{BE}=\infty$	(-50)			V	
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$	(-5)			V	
Turn-ON Time	t_{on}	See specified Test Circuit		(70)		ns	
		See specified Test Circuit		70		ns	
Storage Time	t_{stg}	See specified Test Circuit		(400)		ns	
		See specified Test Circuit		600		ns	
Fall Time	t_f	See specified Test Circuit		(50)		ns	
		See specified Test Circuit		70		ns	



FP202





- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of May, 1998. Specifications and information herein are subject to change without notice.