

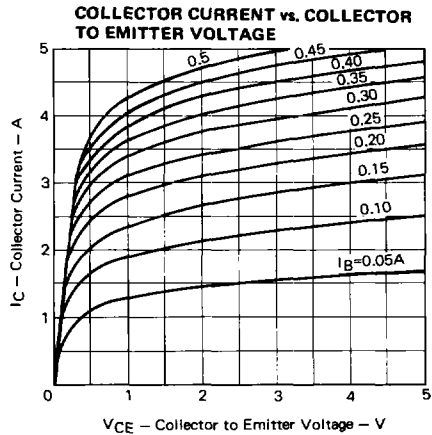
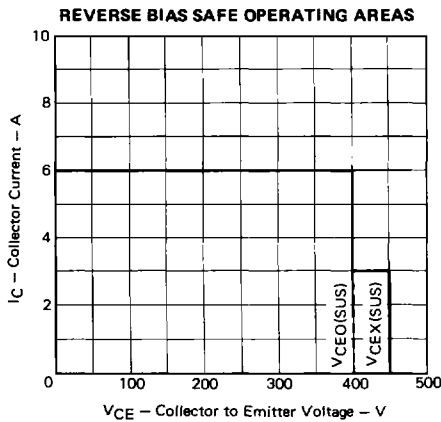
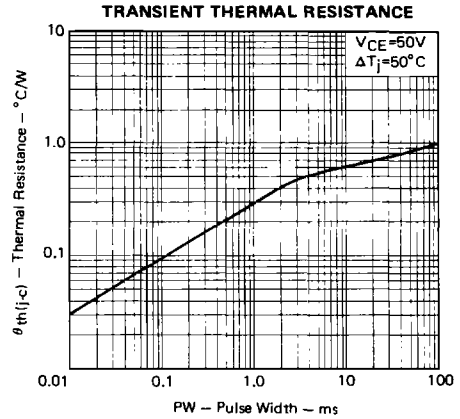
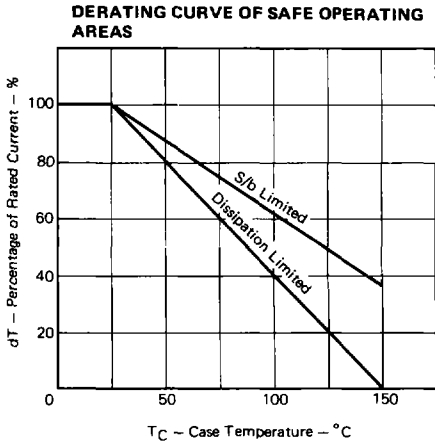
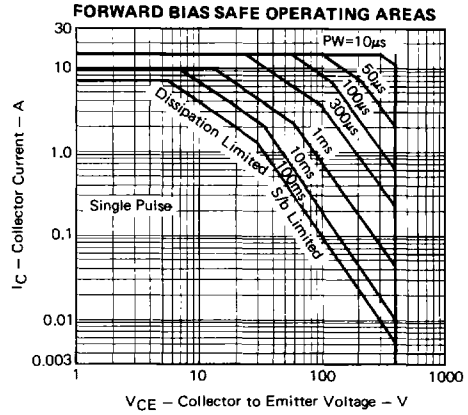
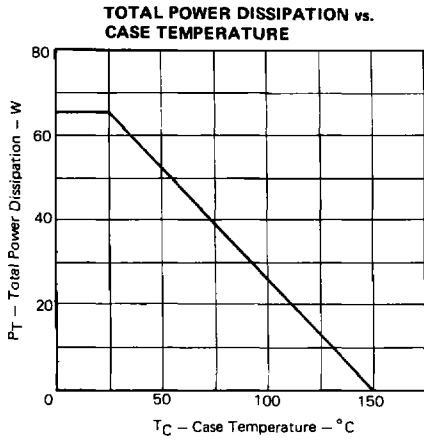
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted.)

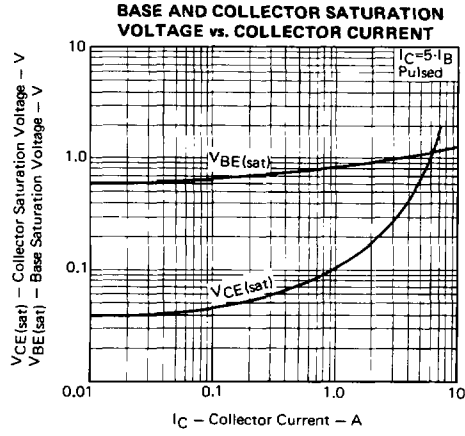
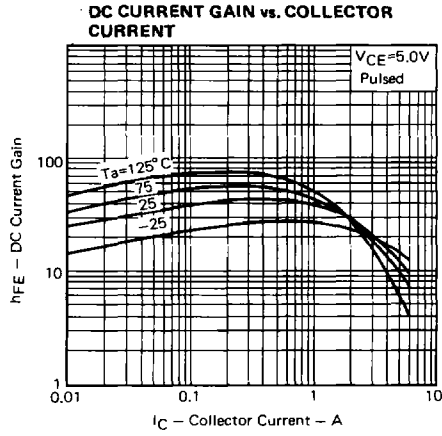
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector to Emitter Sustaining Voltage	V _{CEO(SUS)}	400			V	I _C =3A, I _B =0.6A, L=100μH
	V _{CEX(SUS)1}	450			V	I _C =3A, I _{B1} =-I _{B2} =0.6A, V _{BE(OFF)} =-5V, L=180μH, Ta=125°C *1
	V _{CEX(SUS)2}	400			V	I _C =6A, I _{B1} =1.2A, I _{B2} =-0.6A, V _{BE(OFF)} =-5V, L=180μH Ta=125°C *2
Collector Cutoff Current	I _{CEX1}			10	μA	V _{CE} =400V, V _{BE(OFF)} =-1.5V
	I _{CEX2}			1.0	mA	V _{CE} =400V, V _{BE(OFF)} =-1.5V, Ta=125°C
	I _{CER}			1.0	mA	V _{CE} =400V, R _{BE} =100Ω, Ta=125°C
Emitter Cutoff Current	I _{EB0}			10	μA	V _{EB} =5.0V, I _C =0
Second Breakdown Collector Current	I _{S/B}	1.0			A	V _{CE} =40V, t=1sec, T _c =25°C
Second Breakdown Energy	E _{S/B}	180			μJ	I _C =3A, I _{B1} =0.6A, V _{BE(OFF)} =-5V, R _{BB} =50Ω, L=40μH
DC Current Gain	h _{FE1}	20				V _{CE} =5V, I _C =1.0A *3
	h _{FE2}	10				V _{CE} =5V, I _C =3A *3
Collector Saturation Voltage	V _{CE(sat)}			1.0	V	I _C =3.0A, I _B =0.6A *3
Base Saturation Voltage	V _{BE(sat)}			1.5	V	
Gain Bandwidth Product	f _T	10			MHz	V _{CE} =10V, I _C =0.2A, f=3MHz
Output Capacitance	C _{ob}			150	pF	V _{CB} =10V, I _E =0, f=1MHz
Turn On Time	t _{on}			1.0	μs	I _C =3A, I _{B1} =-I _{B2} =0.6A V _{BE(OFF)} =-5V, R _L =50Ω
Storage Time	t _{stg}			2.5	μs	
Fall Time	t _f			0.7	μs	

*1 V_{CE} clamped V_{clamp} = 450V
 *2 V_{CE} clamped V_{clamp} = 400V
 *3 Pulsed PW ≤ 350μs, duty cycle ≤ 2%

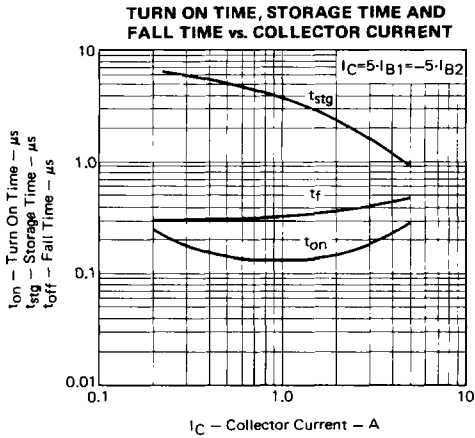


TYPICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)





3



SWITCHING TIME (t_{on} , t_{stg} , t_f) TEST CIRCUIT

