

ELECTRICAL CHARACTERISTICS (T_A = 25°C)

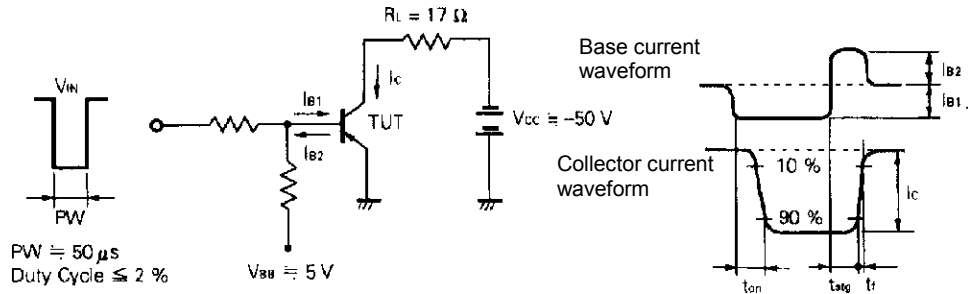
Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Collector to emitter voltage	V _{CEO(SUS)}	I _C = -2.5 A, I _B = -0.25 A, L = 1 mH	-100			V
Collector to emitter voltage	V _{CEX(SUS)}	I _C = -2.5 A, I _{B1} = -I _{B2} = -0.25 A, V _{BE(OFF)} = 1.5 V, L = 180 μH, clamped	-100			V
Collector cutoff current	I _{CBO}	V _{CB} = -100 V, I _E = 0			-10	μA
Collector cutoff current	I _{CER}	V _{CE} = -100 V, R _{BE} = 50 Ω, T _A = 125 °C			-1.0	mA
Collector cutoff current	I _{CEX1}	V _{CE} = -100 V, V _{BE(OFF)} = 1.5 V			-10	μA
Collector cutoff current	I _{CEX2}	V _{CE} = -100 V, V _{BE(OFF)} = 1.5 V, T _A = 125 °C			-1.0	mA
Emitter cutoff current	I _{EBO}	V _{EB(OFF)} = -5.0 V, I _C = 0			-10	μA
DC current gain	h _{FE1} *	V _{CE} = -2.0 V, I _C = -0.5 A	100			
DC current gain	h _{FE2} *	V _{CE} = -2.0 V, I _C = -1.0 A	100		400	
DC current gain	h _{FE3} *	V _{CE} = -2.0 V, I _C = -3.0 A	60			
Collector saturation voltage	V _{CE(sat)1} *	I _C = -3.0 A, I _B = -0.15 A			-0.3	V
Collector saturation voltage	V _{CE(sat)2} *	I _C = -4.0 A, I _B = -0.2 A			-0.5	V
Base saturation voltage	V _{BE(sat)1} *	I _C = -3.0 A, I _B = -0.15 A			-1.2	V
Base saturation voltage	V _{BE(sat)2} *	I _C = -4.0 A, I _B = -0.2 A			-1.5	V
Collector capacitance	C _{ob}	V _{CB} = -10 V, I _E = 0, f = 1.0 MHz		110		pF
Gain bandwidth product	f _T	V _{CE} = -10 V, I _C = 0.5 A		90		MHz
Turn-on time	t _{on}	I _C = -3.0 A, R _L = 17 Ω, I _{B1} = -I _{B2} = -0.15 A, V _{CC} ≅ -50 V Refer to the test circuit.			0.3	μs
Storage time	t _{stg}				1.5	μs
Fall time	t _f				0.4	μs

* Pulse test PW ≤ 350 μs, duty cycle ≤ 2%/Pulsed

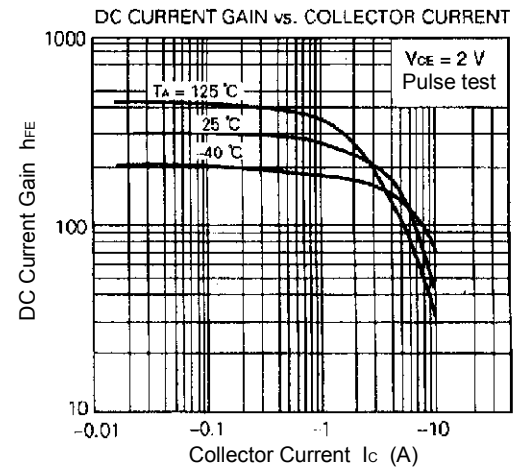
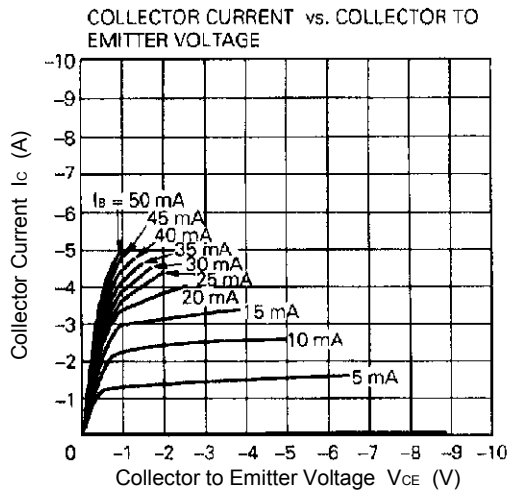
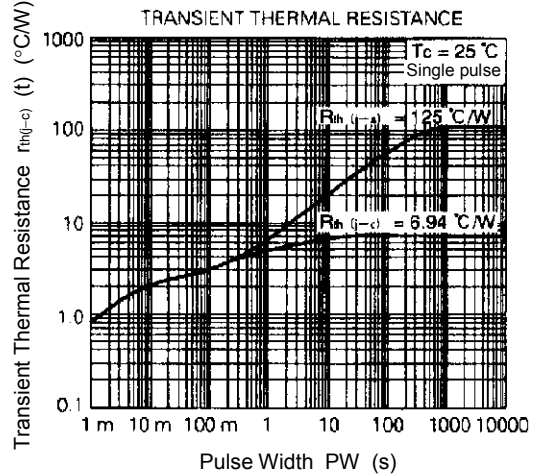
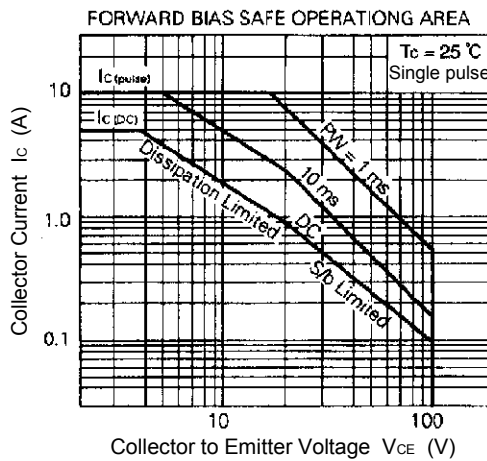
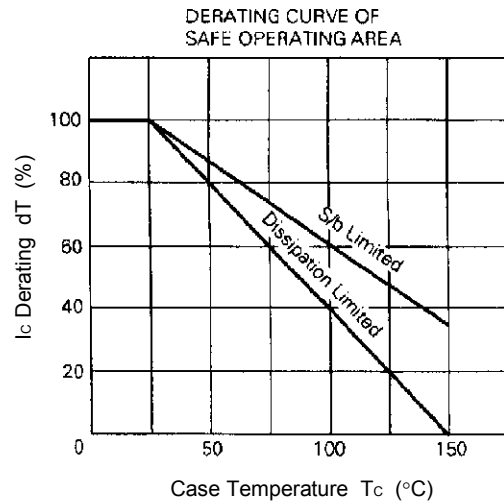
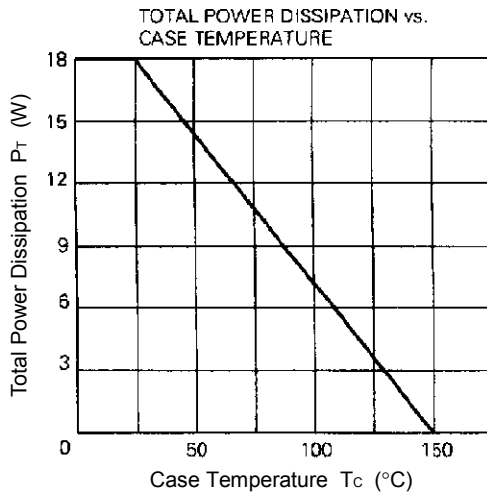
h_{FE} CLASSIFICATION

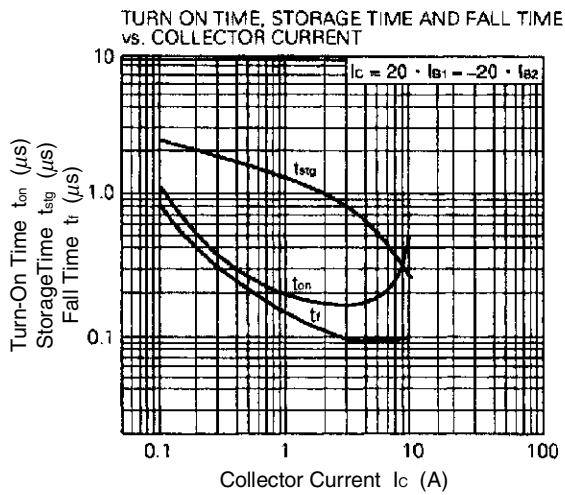
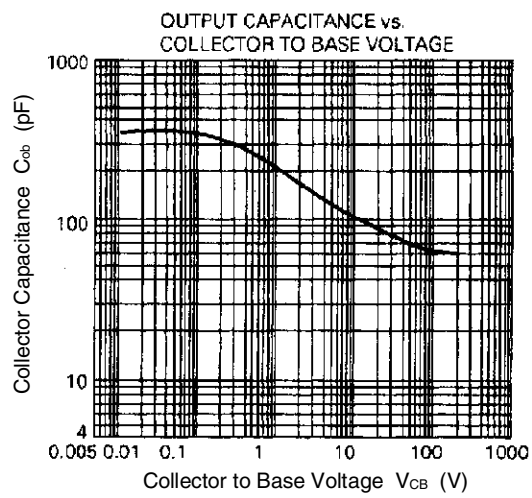
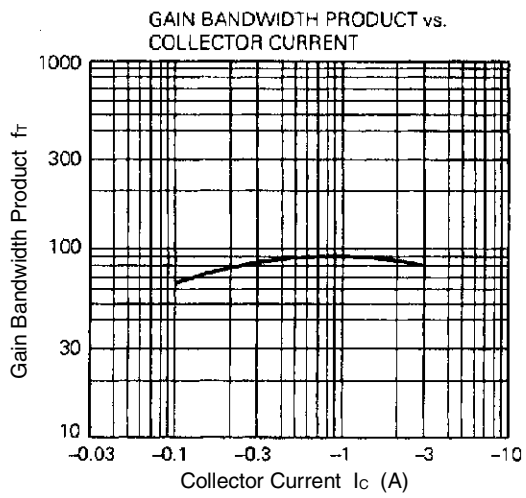
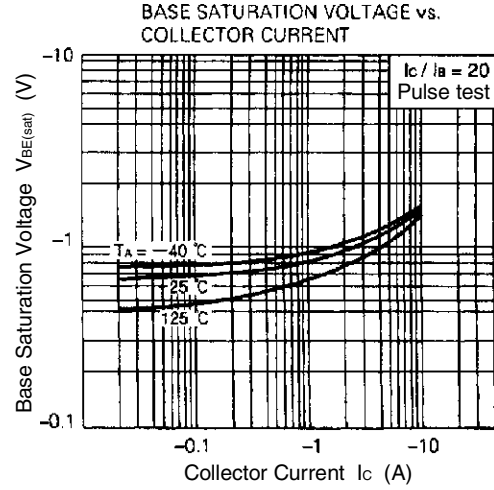
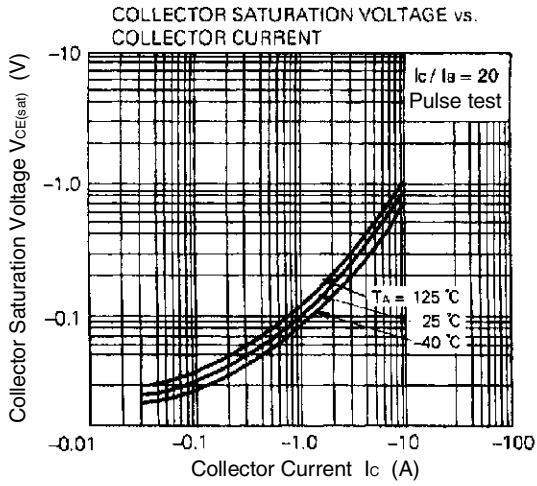
Marking	M	L	K
h _{FE2}	100 to 200	150 to 300	200 to 400

SWITCHING TIME TEST CIRCUIT



TYPICAL CHARACTERISTICS (T_A = 25°C)





[MEMO]

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