

ELECTRICAL CHARACTERISTICS (T_a = 25 °C)

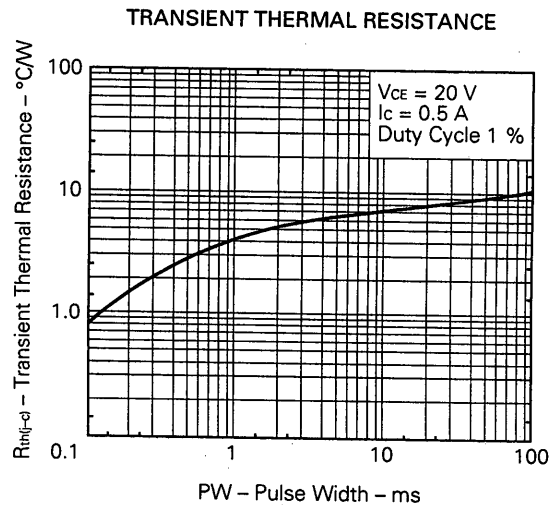
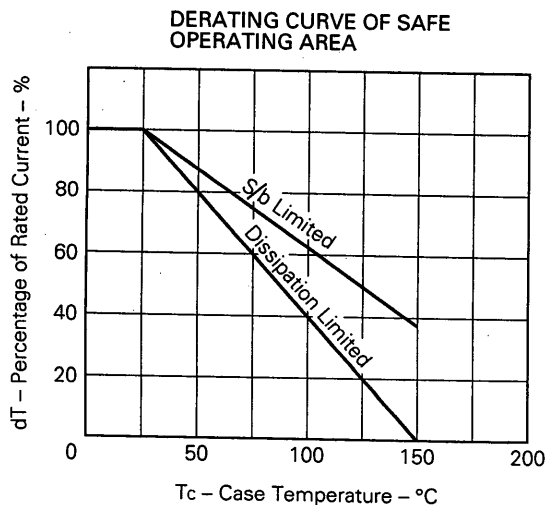
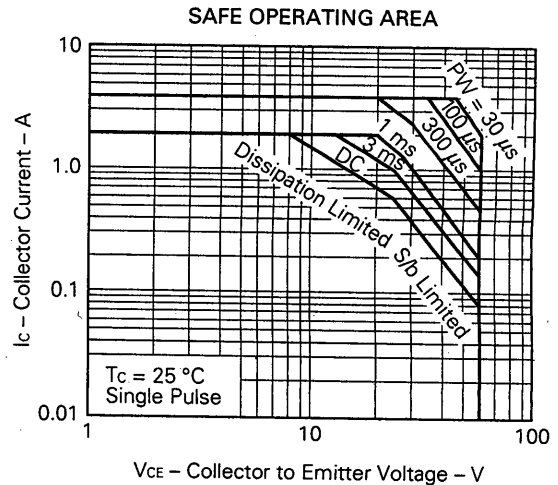
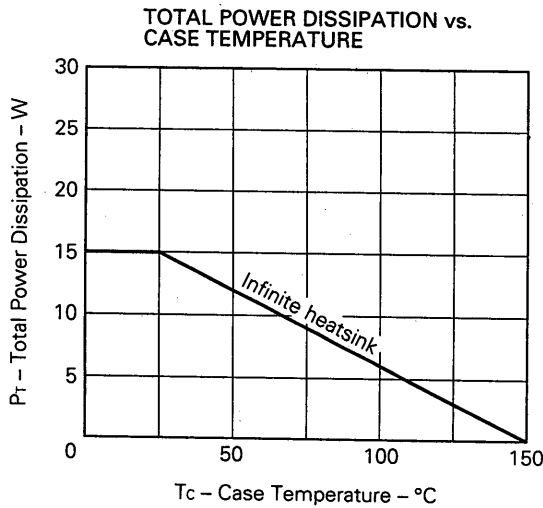
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector Cutoff Current	I _{cBO}			10	μA	V _{CB} = 60 V, I _E = 0
Emitter Cutoff Current	I _{EBO}			1.0	mA	V _{EB} = 5.0 V, I _C = 0
DC Current Gain	h _{FE1} *	1 000				V _{CE} = 2.0 V, I _C = 0.5 A
DC Current Gain	h _{FE2} *	2 000		30 000		V _{CE} = 2.0 V, I _C = 1.0 A
Collector Saturation Voltage	V _{CE(sat)} *			1.5	V	I _C = 1.0 A, I _B = 1.0 mA
Base Saturation Voltage	V _{BE(sat)} *			2.0	V	I _C = 1.0 A, I _B = 1.0 mA
Turn-on Time	t _{on}		0.5		μs	I _C = 1.0 A, I _{B1} = -I _{B2} = 1.0 mA V _{CC} ≅ 50 V, R _L = 50 Ω
Storage Time	t _{stg}		1.0		μs	
Fall Time	t _f		1.0		μs	

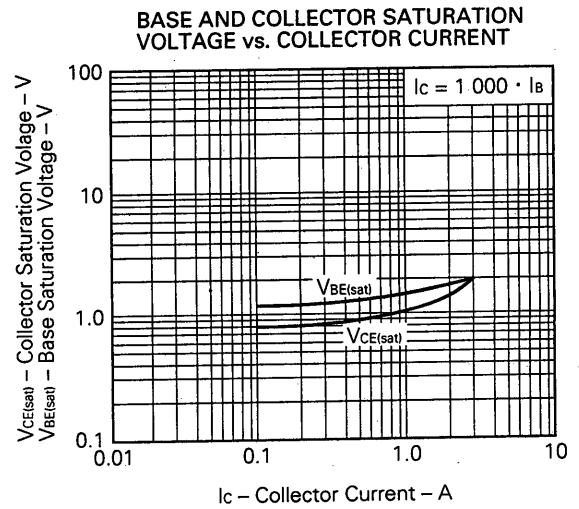
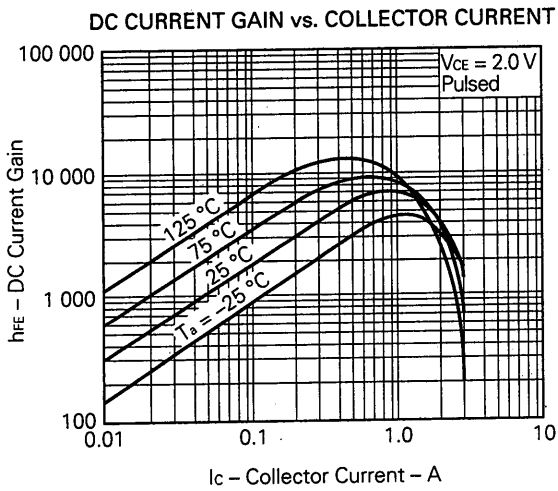
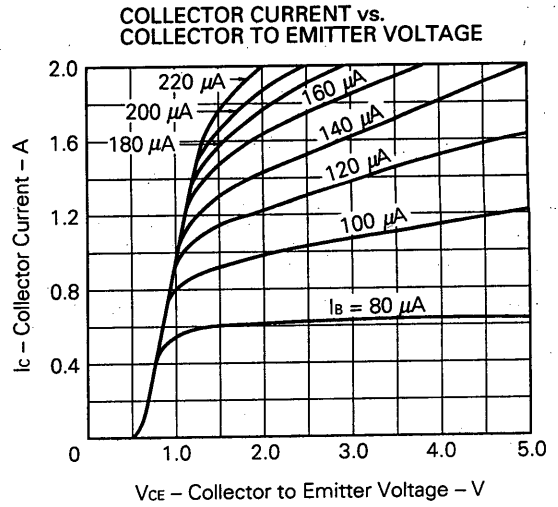
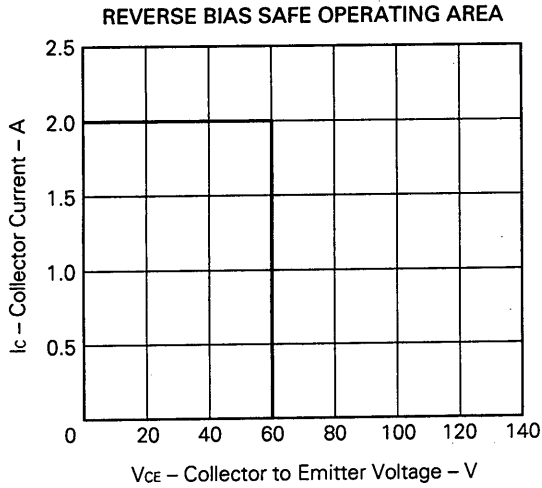
*Pulsed: PW ≤ 350 μs, Duty Cycle ≤ 2 %

h_{FE} Classification

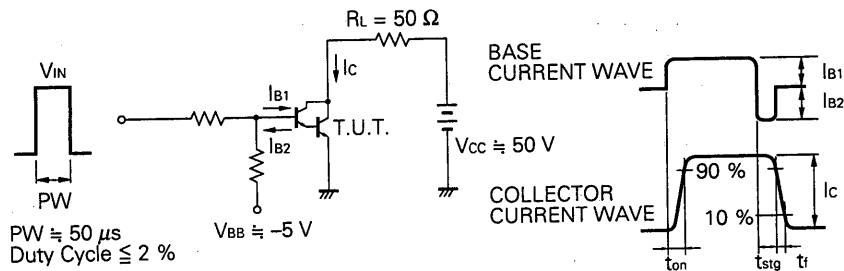
MARKING	M	L	K
h _{FE2}	2 000 to 5 000	4 000 to 10 000	8 000 to 30 000

TYPICAL CHARACTERISTICS (T_a = 25 °C)





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



Reference

Application note name	No.
Quality control of NEC semiconductors devices.	TEI-1202
Quality control guide of semiconductors devices.	MEI-1202
Assembly manual of semiconductors devices.	IEI-1207
Design of Push-Pull Type Switching Regulators (Basic)	TEB-1002
Design of Push-Pull Type Switching Regulators (Applications)	TEB-1003
Optimum Base Drive Conditions of Switching Power Transistors	TEB-1014

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Application examples recommended by NEC Corporation.

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