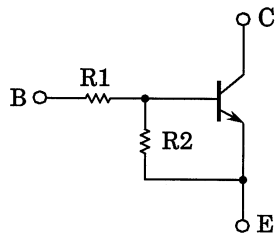


RN1130FV

Switching, Inverter Circuit, Interface Circuit and Driver Circuit Applications

- Built-in bias resistors
- Simplified circuit design
- Reduced quantity of parts and manufacturing process
- Complementary to RN2130FV

Equivalent Circuit



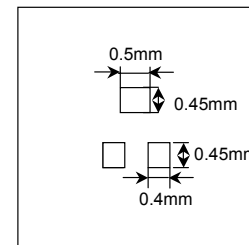
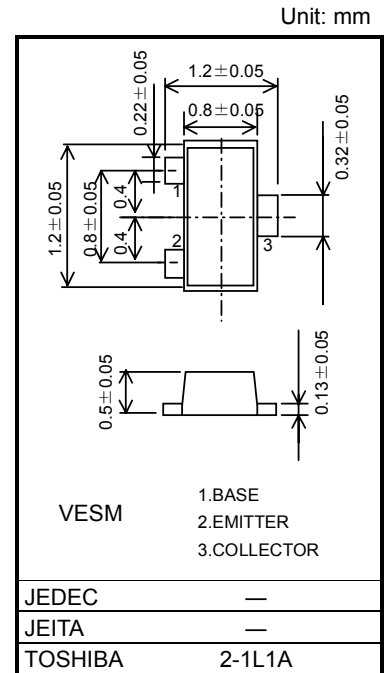
Maximum Ratings (Ta = 25°C)

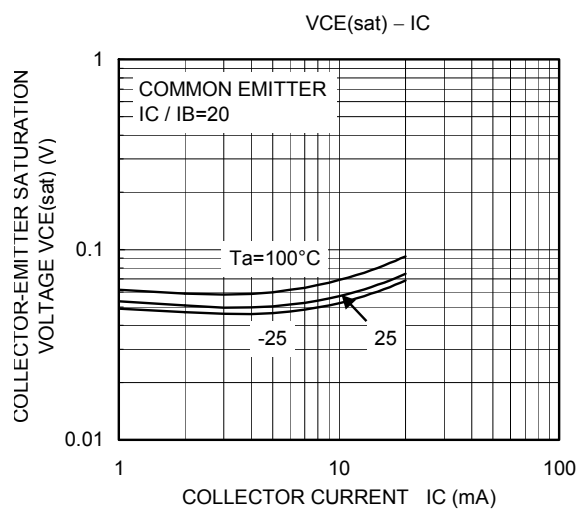
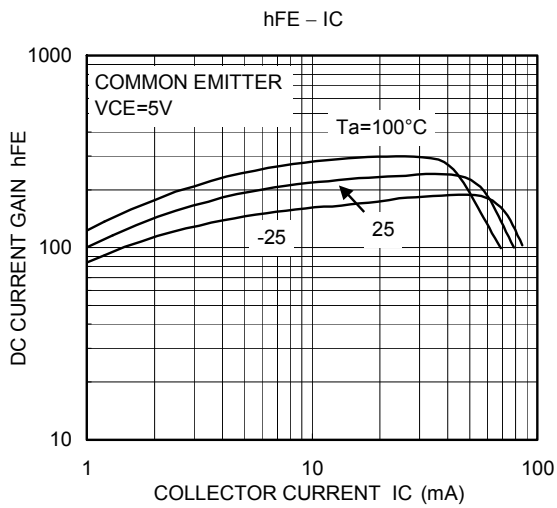
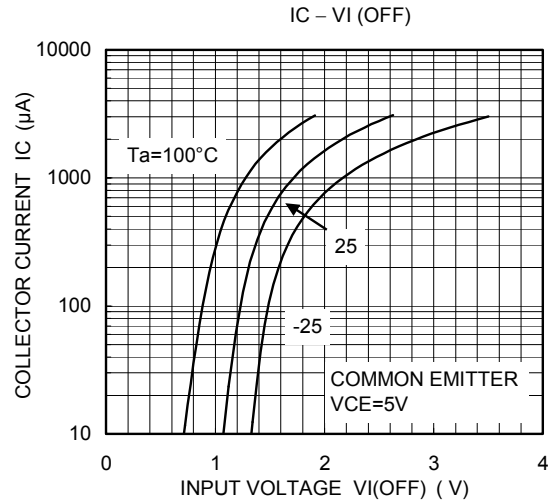
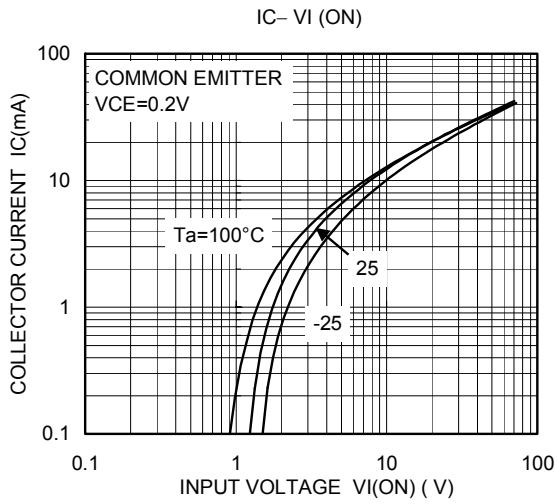
Characteristic	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	10	V
Collector current	I_C	100	mA
Collector power dissipation	P_C (Note)	150	mW
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-55~150	°C

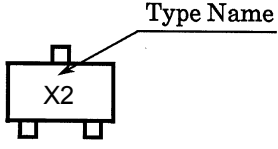
Note: Mounted on FR4 board (25.4 mm × 25.4 mm × 1.6 mm)

Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CB0}	$V_{CB} = 50V, I_E = 0$	—	—	100	nA
	I_{CEO}	$V_{CB} = 50V, I_B = 0$	—	—	500	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = 10V, I_C = 0$	38	—	72	µA
DC current gain	h_{FE}	$V_{CE} = 5V, I_C = 10mA$	100	—	—	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 5mA, I_B = 0.25mA$	—	0.1	0.3	V
Input voltage(ON)	$V_{I(ON)}$	$V_{CE} = 0.2V, I_C = 5mA$	1.7	—	8.2	V
Input voltage(OFF)	$V_{I(OFF)}$	$V_{CE} = 5V, I_C = 0.1mA$	1.0	—	1.6	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 5mA$	—	250	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	—	3	—	pF
Input resistance	R1	—	70	100	130	kΩ
Resistance ratio	R1/R2	—	0.8	1.0	1.2	





Type Name	Marking
RN1130FV	 <p data-bbox="730 262 868 294">Type Name</p>

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030619EAA

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