

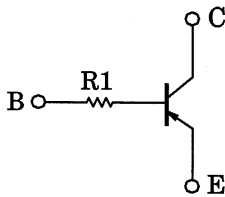
TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

RN2119MFV

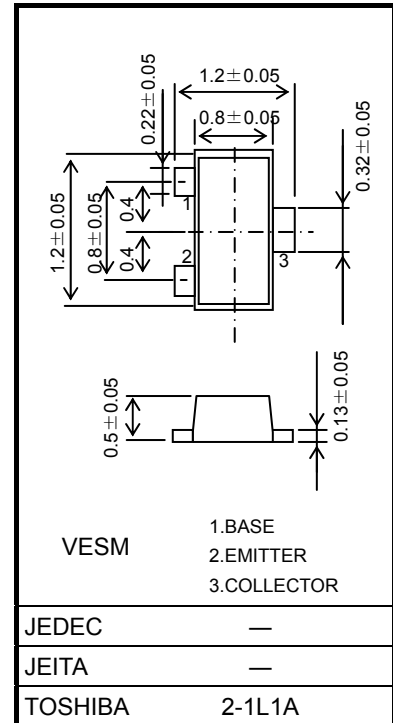
Switching, Inverter Circuit, Interface Circuit and Driver Circuit Applications

- With built-in bias resistors
- Simplify circuit design
- Reduce a quantity of parts and manufacturing process
- Complementary to RN1119MFV

Equivalent Circuit



Unit : mm



Weight: 1.5 mg (typ.)

Absolute Maximum Ratings (Ta = 25°C)

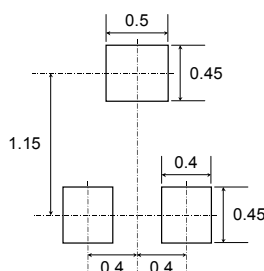
Characteristic	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	-50	V
Collector-emitter voltage	V _{CEO}	-50	V
Emitter-base voltage	V _{EBO}	-5	V
Collector current	I _C	-100	mA
Collector power dissipation	P _C (Note1)	150	mW
Junction temperature	T _j	150	°C
Storage temperature range	T _{stg}	-55 to 150	°C

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

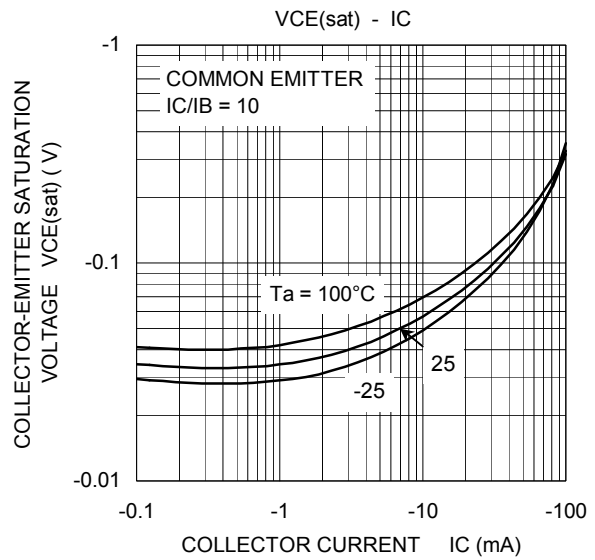
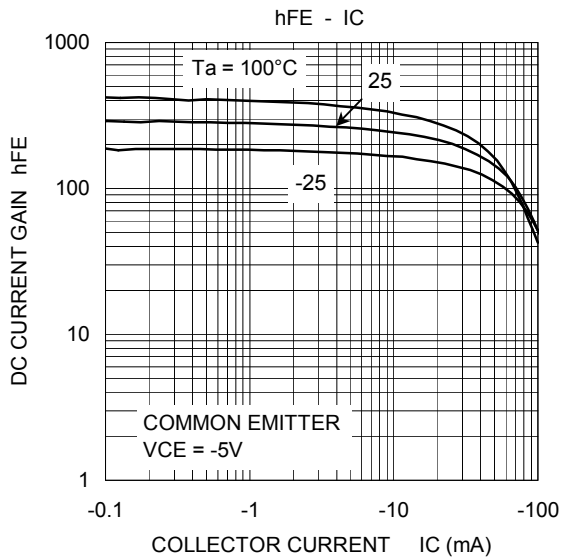
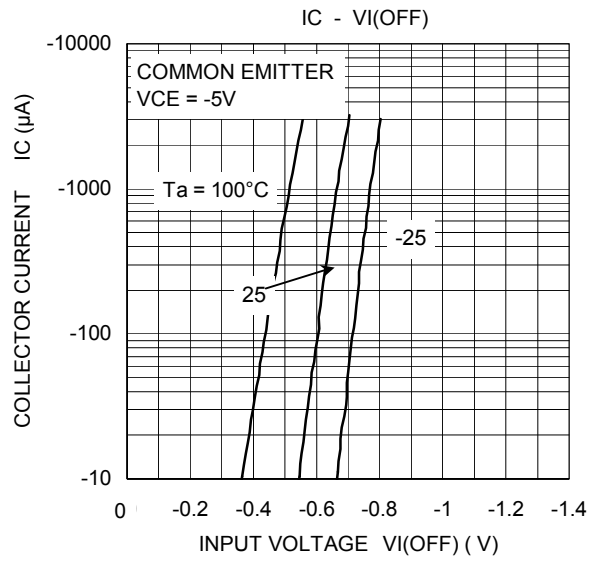
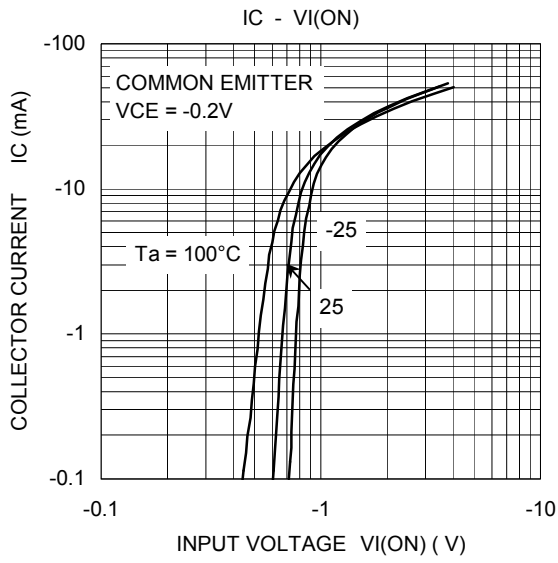
Note 1: Mounted on FR4 board (25.4 mm × 25.4 mm × 1.6 mm)

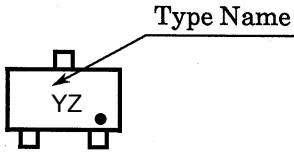
Land Pattern Sample (unit: mm)



Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I_{CBO}	—	$V_{CB} = -50V, I_E = 0$	—	—	-100	nA
Emitter cut-off current	I_{EBO}	—	$V_{EB} = -5V, I_C = 0$	—	—	-100	nA
DC current gain	h_{FE}	—	$V_{CE} = -5V, I_C = -1mA$	120	—	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	$I_C = -5mA, I_B = -0.5mA$	—	-0.1	-0.3	V
Collector output capacitance	C_{ob}	—	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	0.7	—	pF
Input resistor	R1	—	—	0.7	1.0	1.3	k Ω



Type Name	Marking
RN2119MFV	 <p>Type Name</p>

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