

XP04111 (XP4111)

Silicon PNP epitaxial planer transistor

For switching/digital circuits

■ Features

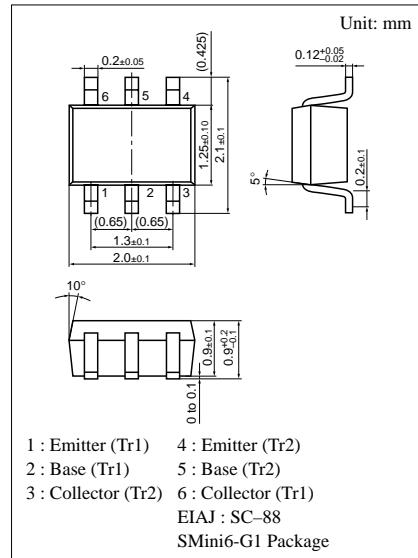
- Two elements incorporated into one package.
(Transistors with built-in resistor)
- Reduction of the mounting area and assembly cost by one half.

■ Basic Part Number of Element

- UNR1111(UN1111) × 2 elements

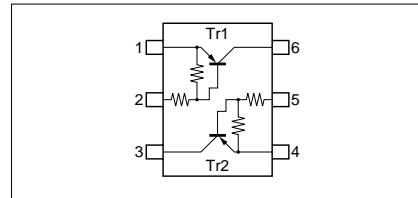
■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Rating of element	V _{CBO}	-50	V
	V _{CEO}	-50	V
	I _C	-100	mA
Overall	P _T	150	mW
	T _j	150	°C
	T _{stg}	-55 to +150	°C



Marking Symbol: 9U

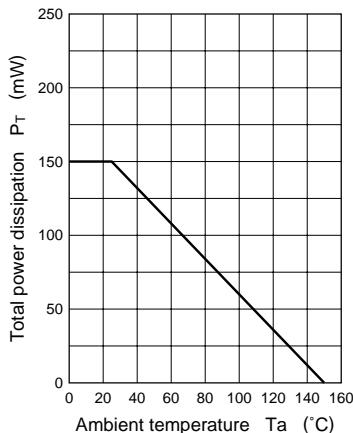
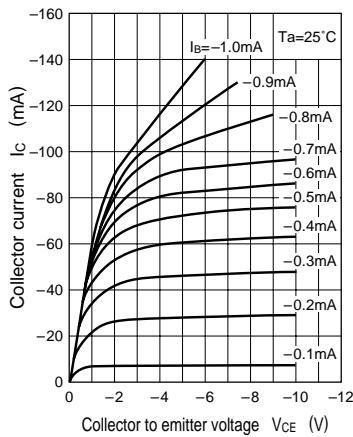
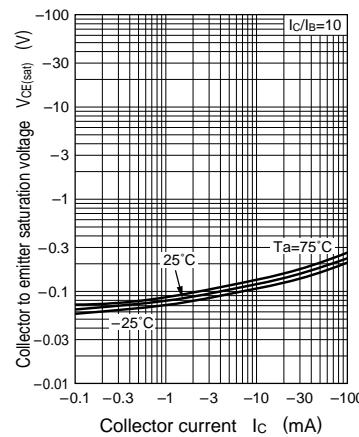
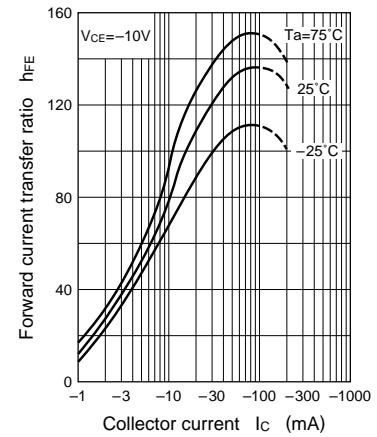
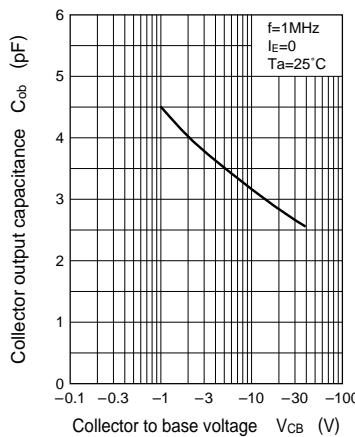
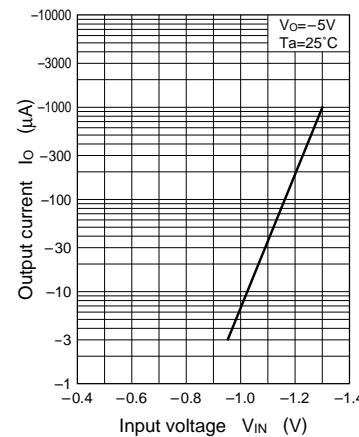
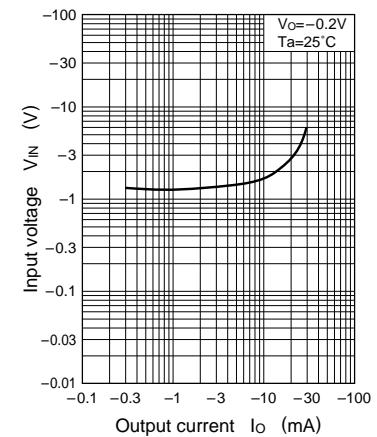
Internal Connection



■ Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	V _{CBO}	I _C = -10μA, I _E = 0	-50			V
Collector to emitter voltage	V _{CEO}	I _C = -2mA, I _B = 0	-50			V
Collector cutoff current	I _{CBO}	V _{CB} = -50V, I _E = 0			-0.1	μA
	I _{CEO}	V _{CE} = -50V, I _B = 0			-0.5	μA
Emitter cutoff current	I _{EBO}	V _{EB} = -6V, I _C = 0			-0.5	mA
Forward current transfer ratio	h _{FE}	V _{CE} = -10V, I _C = -5mA	35			
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = -10mA, I _B = -0.3mA			-0.25	V
Output voltage high level	V _{OH}	V _{CC} = -5V, V _B = -0.5V, R _L = 1kΩ	-4.9			V
Output voltage low level	V _{OL}	V _{CC} = -5V, V _B = -2.5V, R _L = 1kΩ			-0.2	V
Transition frequency	f _T	V _{CB} = -10V, I _E = 1mA, f = 200MHz	80			MHz
Input resistance	R _I		-30%	10	+30%	kΩ
Resistance ratio	R _I /R ₂		0.8	1.0	1.2	

Note) The Part number in the Parenthesis shows conventional part number.

P_T — Ta I_C — V_{CE}  $V_{CE(sat)}$ — I_C  h_{FE} — I_C  C_{ob} — V_{CB}  I_O — V_{IN}  V_{IN} — I_O 

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