

UNR921TJ (UN921TJ)

Silicon NPN epitaxial planer type

For digital circuit

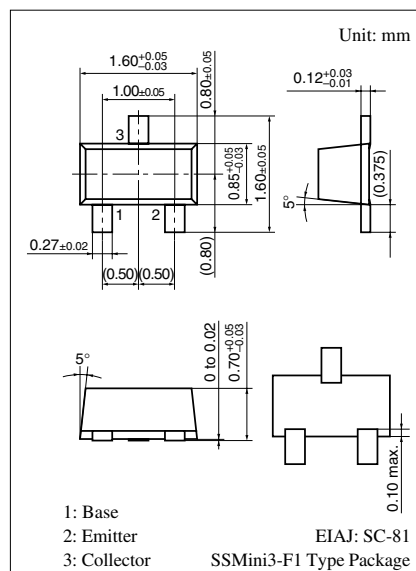
For switching

■ Features

- Costs can be reduced through downsizing of the equipment and reduction of the number of parts.
- SS-mini type package, allowing automatic insertion through tape packing.
- Flat lead type, high mounting efficiency

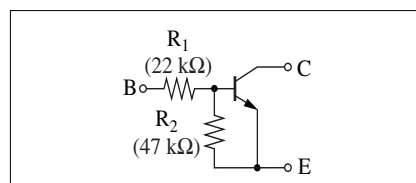
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	50	V
Collector to emitter voltage	V_{CEO}	50	V
Collector current	I_C	100	mA
Total power dissipation	P_T	125	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$



Marking Symbol: EZ

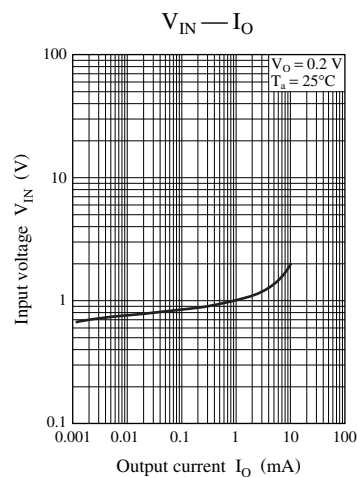
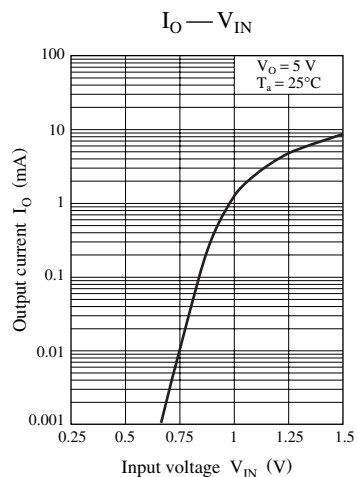
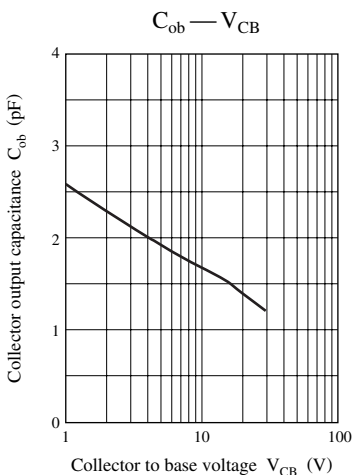
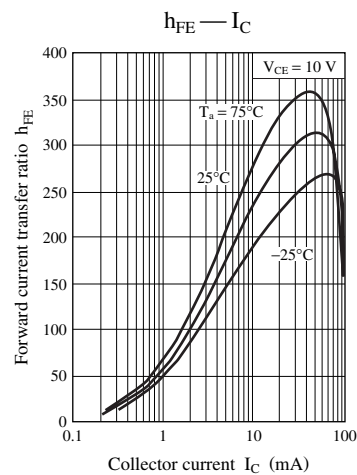
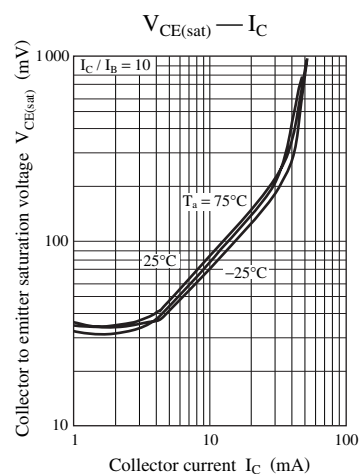
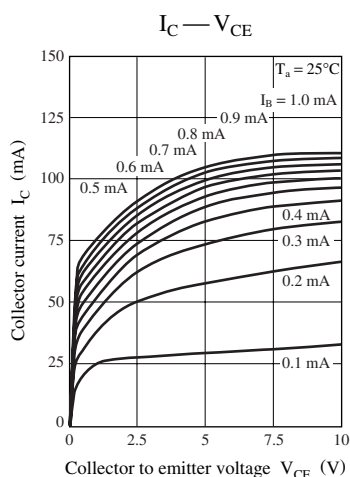
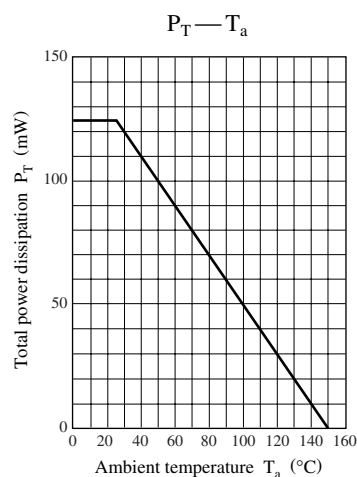
Internal Connection



■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 50\text{ V}, I_E = 0$			0.1	μA
	I_{CEO}	$V_{CE} = 50\text{ V}, I_B = 0$			0.5	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 6\text{ V}, I_C = 0$			0.2	mA
Collector to base voltage	V_{CBO}	$I_C = 10\text{ }\mu\text{A}, I_E = 0$	50			V
Collector to emitter voltage	V_{CEO}	$I_C = 2\text{ mA}, I_B = 0$	50			V
Forward current transfer ratio	h_{FE}	$V_{CE} = 10\text{ V}, I_C = 5\text{ mA}$	80		400	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\text{ mA}, I_B = 0.3\text{ mA}$			0.25	V
High-level output voltage	V_{OH}	$V_{CC} = 5\text{ V}, V_B = 0.5\text{ V}, R_L = 1\text{ k}\Omega$	4.9			V
Low-level output voltage	V_{OL}	$V_{CC} = 5\text{ V}, V_B = 2.5\text{ V}, R_L = 1\text{ k}\Omega$			0.2	V
Input resistance	R_1		-30%	22	+30%	k Ω
Resistance ratio	R_1/R_2			0.47		
Transition frequency	f_T	$V_{CB} = 10\text{ V}, I_E = -2\text{ mA}, f = 200\text{ MHz}$		150		MHz

Note) The part number in the parenthesis shows conventional part number.



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