UNR5154 (UN5154)

Silicon PNP epitaxial planar type

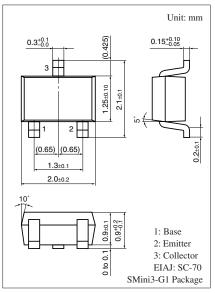
For digital circuits

Features

- \bullet High forward current transfer ratio h_{FE}
- Costs can be reduced through downsizing of the equipment and reduction of the number of parts
- S-Mini type package, allowing automatic insertion through tape packing and magazine packing

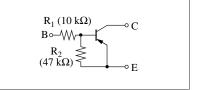
Absolute Maximum Ratings $T_a = 25^{\circ}C$

Parameter	Symbol	Rating	Unit				
Collector-base voltage (Emitter open)	V _{CBO}	-30	V				
Collector-emitter voltage (Base open)	V _{CEO}	-30	V				
Collector current	I _C	-100	mA				
Total power dissipation	P _T	150	mW				
Junction temperature	Tj	150	°C				
Storage temperature	T _{stg}	-55 to +150	°C				



Marking Symbol: EV

Internal Connection



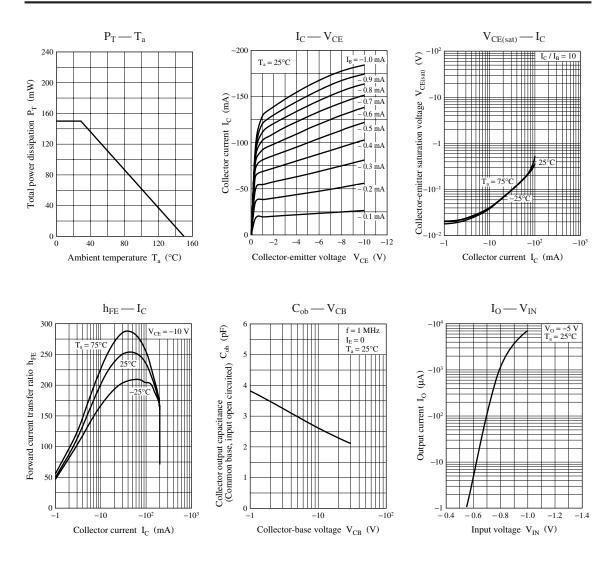
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_{\rm C} = -10 \ \mu \text{A}, \ I_{\rm E} = 0$	-30			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_{\rm C} = -2 \text{ mA}, I_{\rm B} = 0$	-30			V
Collector-base cutoff current (Emitter open)	I _{CBO}	$V_{CB} = -30 \text{ V}, I_E = 0$			- 0.1	μΑ
Collector-emitter cutoff current (Base open)	I _{CEO}	$V_{CE} = -30 \text{ V}, I_B = 0$			- 0.5	
Emitter-base cutoff current (Collector open)	I _{EBO}	$V_{EB} = -3 V, I_C = 0$			- 0.1	mA
Forward current transfer ratio	h _{FE}	$V_{CE} = -10 \text{ V}, I_C = -5 \text{ mA}$	80			_
Collector-emitter saturation voltage	V _{CE(sat)}	$I_{\rm C} = -50$ mA, $I_{\rm B} = -0.33$ mA		- 0.5	-1.2	V
Output voltage high-level	V _{OH}	$V_{CC} = -5 \text{ V}, \text{ V}_{B} = -0.5 \text{ V}, \text{ R}_{L} = 1 \text{ k}\Omega$	-4.9			V
Output voltage low-level	V _{OL}	$V_{CC} = -5 \text{ V}, \text{ V}_{B} = -2.5 \text{ V}, \text{ R}_{L} = 1 \text{ k}\Omega$			- 0.2	V
Transition frequency	f _T	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 200 \text{ MHz}$		80		MHz
Input resistance	R ₁		-30%	10	+30%	kΩ
Resistance ratio	R_1/R_2			0.213		

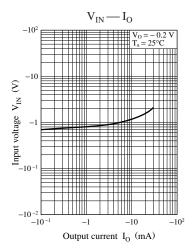
Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

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

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