RT1N14BC-T150

Transistor With Resistor For Switching Application Silicon NPN Epitaxial Type

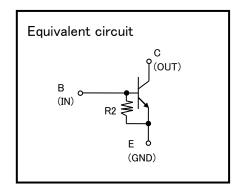
AEC-Q101 Compliance

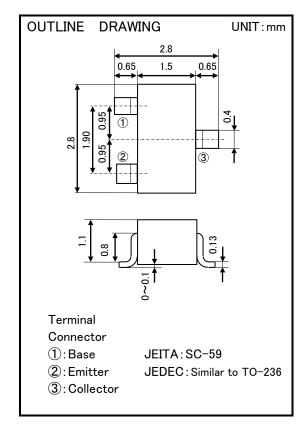
FEATURE

- •Built-in bias resistor (R2=10k Ω)
- Mini package for easy mounting

APPLICATION

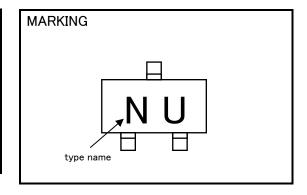
Inverted circuit, switching circuit, interface circuit, driver circuit.





MAXIMUM RATING(Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT	
V_{CBO}	Collector to Base voltage	50	V	
V_{EBO}	Emitter to Base voltage	6	٧	
V_{CEO}	Collector to Emitter voltage	50	٧	
I_{C}	Collector current	100	mA	
\mathbf{I}_{CM}	Peak Collector current	200	mA	
Pc	Collector dissipation	200	mW	
T_{j}	Junction temperature	+150	ပွ	
T_{stg}	Storage temperature	−55 ~ +150	°C	

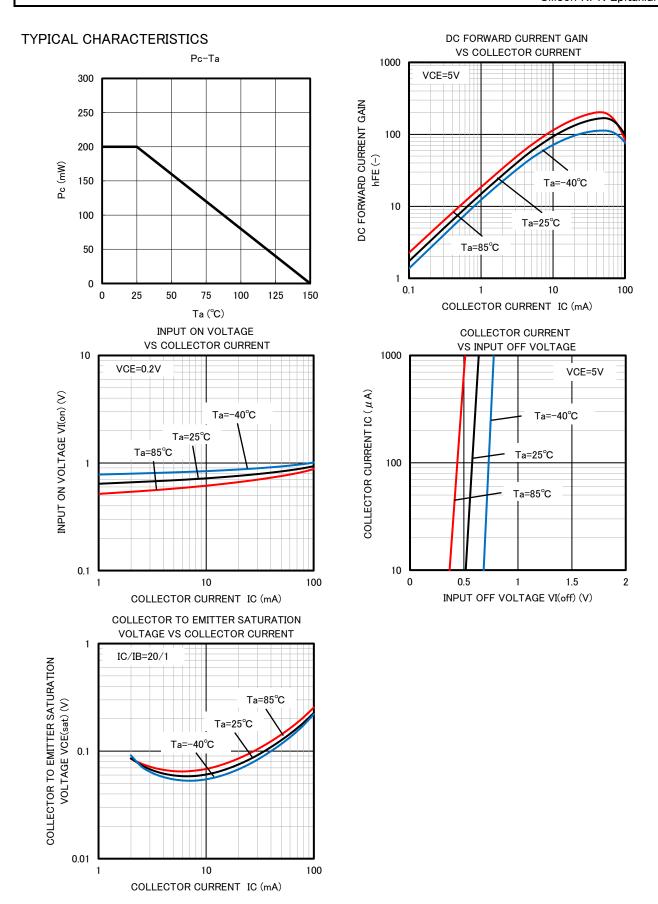


ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	UNIT
$V_{(BR)CEO}$	C to E breakdown voltage	I _C =100 μ A、R _{BE} =∞	50	I	I	V
\mathbf{I}_{CBO}	Collector cut off current	V _{CB} =50V, I _E =0	l	I	0.1	μΑ
\mathbf{I}_{EBO}	Emitter cut off current	V _{EB} =5V, I _C =0	375	500	725	μΑ
h_{FE}	DC forward current gain	V _{CE} =5V、I _C =5mA	30	I	I	-
$V_{\text{CE(sat)}}$	C to E saturation voltage	$I_C=10$ mA, $I_B=0.5$ mA	l	I	0.3	V
R2	Emitter-Base resistor	_	7	10	13	kΩ
f_T	Gain band width product	$V_{CE}=6V$, $I_{E}=-10mA$	_	200	_	MHz

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Keep safety first in your circuit designs!

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