# RT1P141U-T150

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

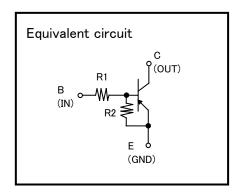
AEC-Q101 Compliance

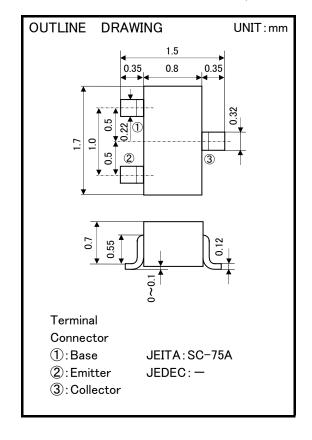
#### **FEATURE**

- Built-in bias resistor (R1=10k $\Omega$ ,R2=10k $\Omega$ )
- Mini package for easy mounting

#### **APPLICATION**

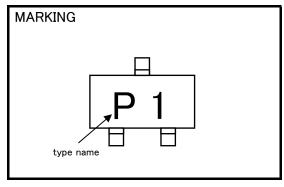
Inverted circuit, switching circuit, interface circuit, driver circuit.





## MAXIMUM RATING(Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT	
$V_{\text{CBO}}$	Collector to Base voltage	-50	٧	
$V_{EBO}$	Emitter to Base voltage	-10	V	
$V_{CEO}$	Collector to Emitter voltage	-50	V	
$V_{IN}$	Input voltage	-40	V	
$I_{C}$	Collector current	-100	mA	
$I_{CM}$	Peak Collector current	-200	mA	
$P_{c}$	Collector dissipation	150	mW	
$T_{j}$	Junction temperature	+150	°C	
$T_{stg}$	Storage temperature	−55 <b>~</b> +150	°C	



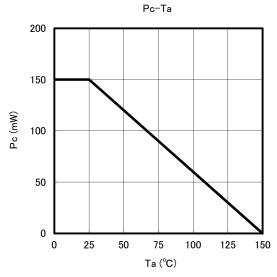
### ELECTRICAL CHARACTERISTICS (Ta=25°C)

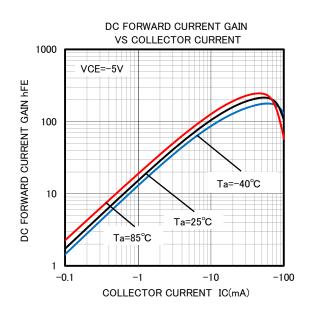
SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	OINLI
$V_{(BR)CEO}$	C to E breakdown voltage	$I_{C}=-100 \mu$ A, $R_{BE}=\infty$	-50	1	_	V
$\mathbf{I}_{CBO}$	Collector cut off current	$V_{CB}=-50V$ , $I_{E}=0$	1	1	-0.1	μΑ
$\mathbf{I}_{EBO}$	Emitter cut off current	$V_{EB}=-5V$ , $I_{C}=0$	-192	-250	-357	μΑ
$h_{FE}$	DC forward current gain	$V_{CE}$ =-5V, $I_{C}$ =-10mA	50	_	_	_
$V_{CE(sat)}$	C to E saturation voltage	$I_c=-10$ mA、 $I_B=-0.5$ mA	_	-0.1	-0.3	V
$V_{I(ON)}$	Input on voltage	$V_{CE} = -0.2V$ , $I_{C} = -5mA$	-	-1.5	-3.0	V
$V_{I(OFF)}$	Input off voltage	$V_{CE} = -5V$ , $I_{C} = -100 \mu A$	-0.8	-1.1	_	V
R1	Input resistor	_	7	10	13	kΩ
R2/R1	Resistor ratio	_	0.9	1.0	1.1	_
$f_{T}$	Gain band width product	$V_{CE}$ =-6 $V$ , $I_{E}$ =10mA		150	_	MHz

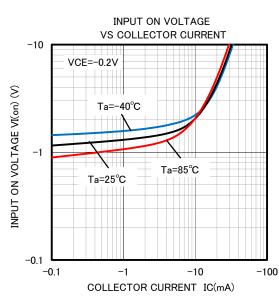
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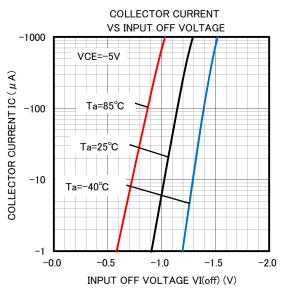
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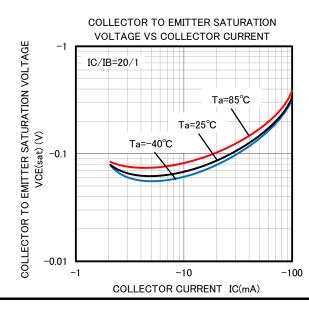














#### Keep safety first in your circuit designs!

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