

# RT3P77M

Composite Transistor With Resistor  
For Switching Application  
Silicon Epitaxial Type

## DESCRIPTION

RT3P77M is composite transistor built with two RT1P140 chips in SC-88 package.

## FEATURE

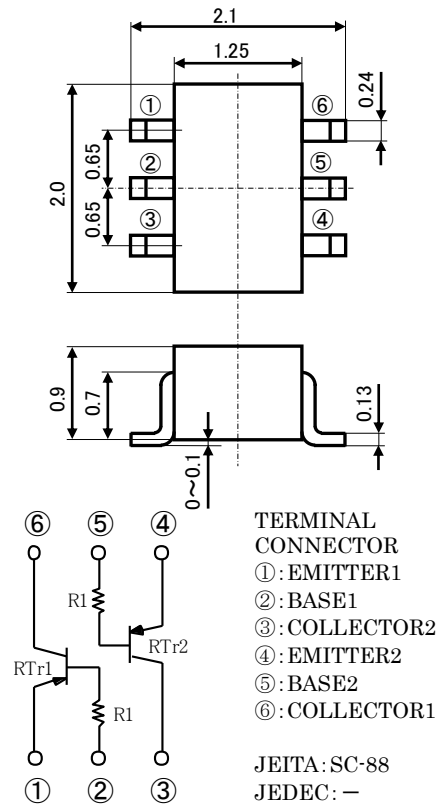
Built-in bias resistor ( $R_1=10k\Omega$ )  
Mini package for easy mounting

## APPLICATION

Inverted circuit, Switching circuit,  
Interface circuit, Driver circuit

## OUTLINE DRAWING

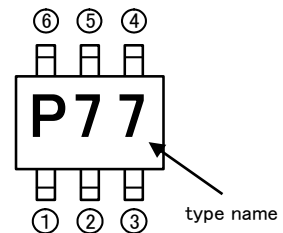
Unit:mm



## MAXIMUM RATING ( $T_a=25^\circ\text{C}$ ) (RT1, RT2 COMMON)

SYMBOL	PARAMETER	RATING	UNIT
VCBO	Collector to Base voltage	-50	V
VEBO	Emitter to Base voltage	-6	V
VCEO	Collector to Emitter voltage	-50	V
IC	Collector current	-100	mA
ICM	Peak Collector current	-200	mA
PT	Total dissipation	200	mW
T <sub>j</sub>	Junction temperature	+150	°C
T <sub>stg</sub>	Storage temperature	-55 ~ +150	°C

## MARKING



## ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ ) (RT1, RT2 COMMON)

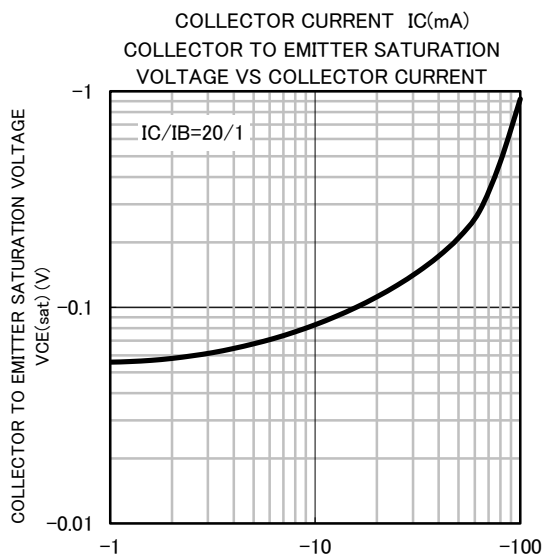
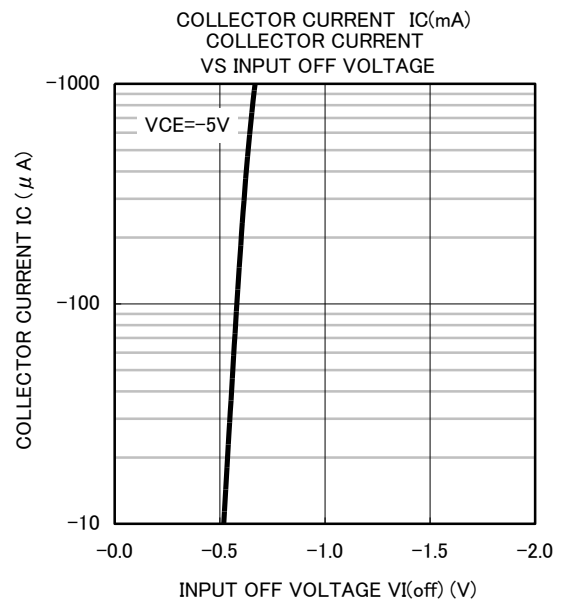
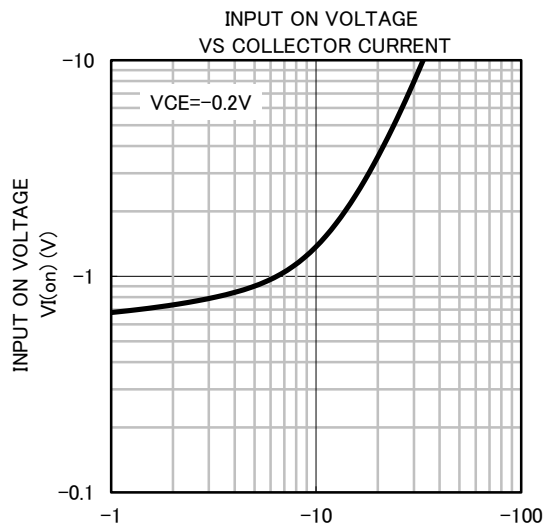
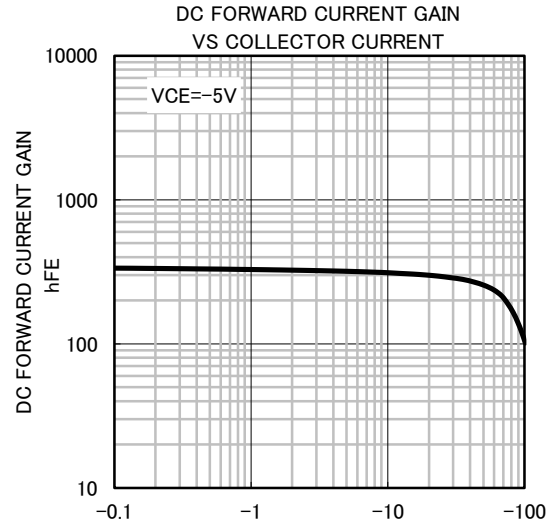
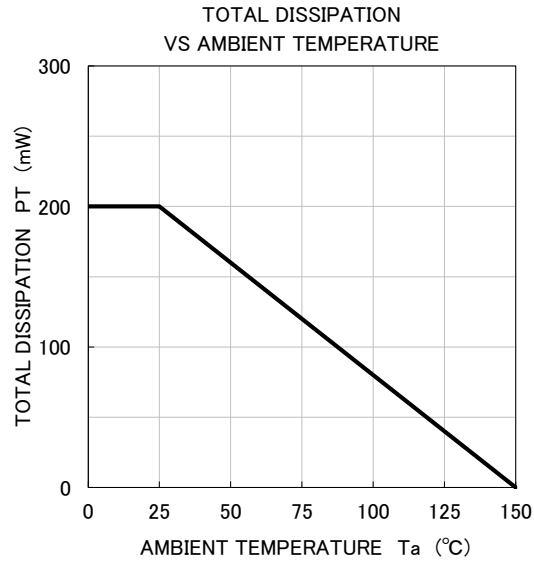
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
V(BR)CEO	Collector to Emitter breakdown voltage	$I_C=-100\mu\text{A}$ , $R_{BE}=\infty$	-50	-	-	V
ICBO	Collector cut off current	$V_{CB}=-50\text{V}$ , $I_E=0$	-	-	-0.1	$\mu\text{A}$
IEBO	Emitter cut off current	$V_{EB}=-5\text{V}$ , $I_C=0$	-	-	-0.1	$\mu\text{A}$
hFE	DC forward current gain	$V_{CE}=-5\text{V}$ , $I_C=-1\text{mA}$	100	-	-	-
VCE(sat)	Collector to Emitter saturation voltage	$I_C=-10\text{mA}$ , $I_B=-0.5\text{mA}$	-	-	-0.3	V
R <sub>1</sub>	Input resistor	-	7	10	13	k $\Omega$
f <sub>T</sub>	Gain band width product	$V_{CE}=-6\text{V}$ , $I_E=10\text{mA}$	-	150	-	MHz

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## TYPICAL CHARACTERISTICS

( $T_a=25^\circ\text{C}$ )( $R_{Tr1}, R_{Tr2}$  COMMON)



COLLECTOR CURRENT  $I_C$  (mA)

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

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