RT2P10M

Composite Transistor With Resistor
For Switching Application
Silicon PNP Epitaxial Type

DESCRIPTION

RT2P10M is composite transistor with built-in bias resistor.

FEATURE

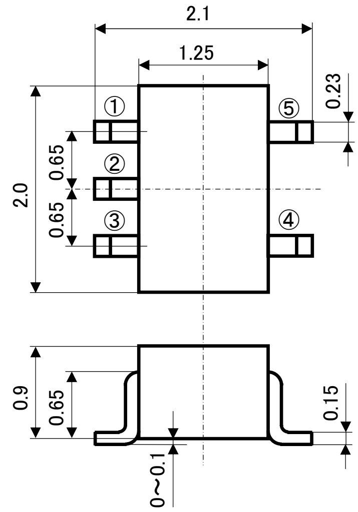
Built-in bias resistor (R1=4.7kΩ, R2=10kΩ)
Mini package for easy mounting

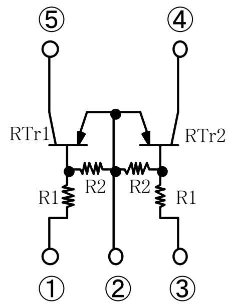
APPLICATION

Inverted circuit, Switching circuit,
Interface circuit, Driver circuit

OUTLINE DRAWING

Unit: mm





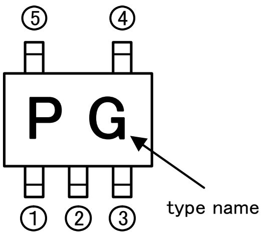
TERMINAL
CONNECTOR
①: BASE1
②: EMITTER (COMMON)
③: BASE2
④: COLLECTOR2
⑤: COLLECTOR1

JEITA: SC-88A
JEDEC: －

MAXIMUM RATING (Ta=25℃) (RTr1, RTr2 COMMON)

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	-50	V
V_{EBO}	Emitter to Base voltage	-7	V
V_{CEO}	Collector to Emitter voltage	-50	V
V_{IN}	Input voltage	-20	V
I_C	Collector current	-100	mA
I_{CM}	Peak Collector current	-200	mA
P_T	Total dissipation	200	mW
T_j	Junction temperature	＋150	℃
T_{stg}	Storage temperature	-55～＋150	℃

MARKING

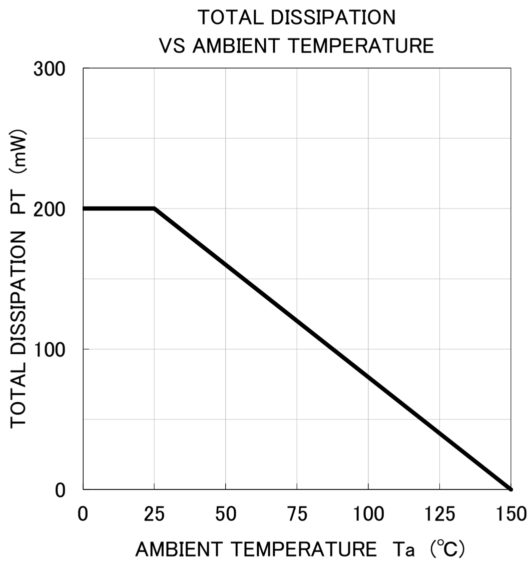


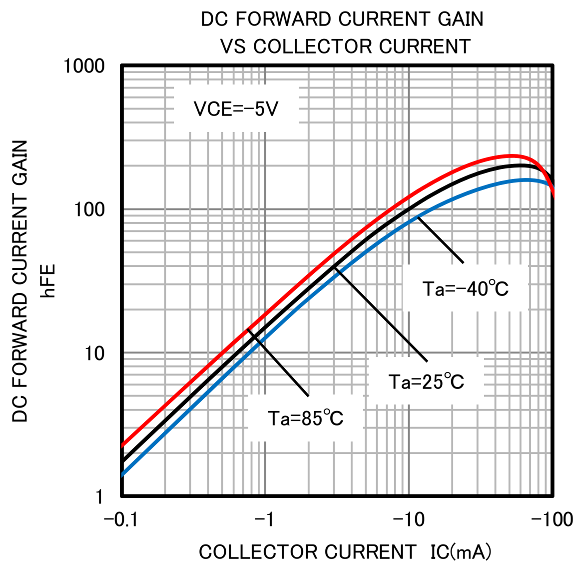
ELECTRICAL CHARACTERISTICS (Ta=25℃) (RTr1, RTr2 COMMON)

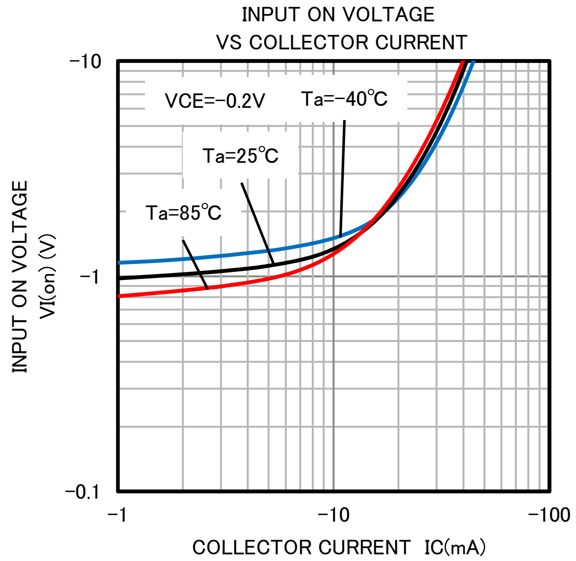
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CEO}$	Collector to Emitter breakdown voltage	I_C=-100μA, R_{BE}=∞	-50	－	－	V
I_{CBO}	Collector cut off current	V_{CB}=-50V, I_E=0	－	－	-0.1	μA
I_{EBO}	Emitter cut off current	V_{EB}=-5V, I_C=0	-255	-340	-493	μA
h_{FE}	DC forward current gain	V_{CE}=-5V, I_C=-10mA	30	－	－	－
$V_{CE(sat)}$	Collector to Emitter saturation voltage	I_C=-10mA, I_B=-0.5mA	－	-0.1	-0.3	V
$V_{I(ON)}$	Input on voltage	V_{CE}=-0.2V, I_C=-5mA	－	-1.0	-1.8	V
$V_{I(OFF)}$	Input off voltage	V_{CE}=-5V, I_C=-100μA	-0.5	-0.8	－	V
R_1	Input resistor	－	3.3	4.7	6.1	kΩ
R_2/R_1	Resistor ratio	－	1.7	2.1	2.6	－
f_T	Gain band width product	V_{CE}=-6V, I_E=10mA	－	150	－	MHz

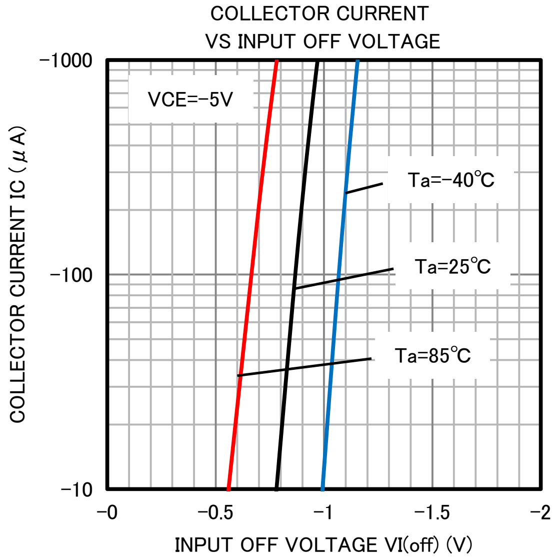
TYPICAL CHARACTERISTICS

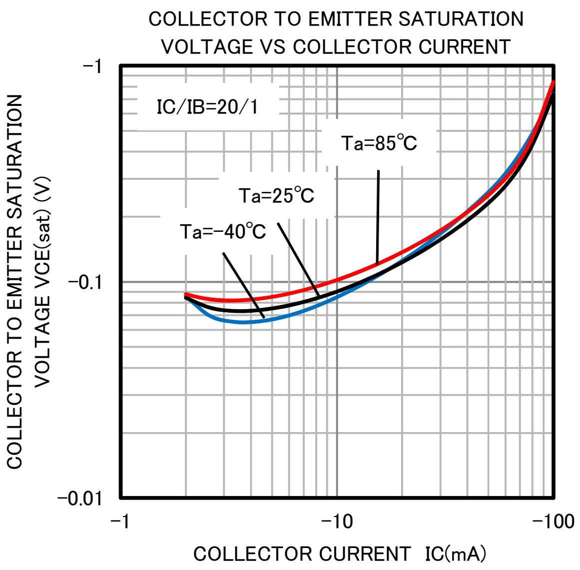
(RTr1,RTr2 COMMON)











ISAHAYA ELECTRONICS CORPORATION