# RT3PEEM

Composite Transistor With Resistor For Switching Application Silicon Epitaxial Type

### DESCRIPTION

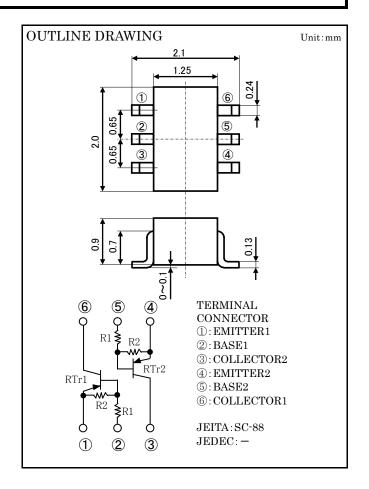
RT3PEEM is composite transistor built with two RT1P234 chips in SC-88 package.

### **FEATURE**

Built-in bias resistor (R1=2.2k $\Omega$ , R2=10k $\Omega$ ) Mini package for easy mounting

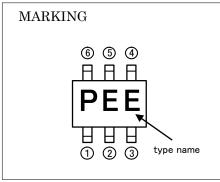
### APPLICATION

Inverted circuit, Switching circuit, Interface circuit, Driver circuit



## MAXIMUM RATING(Ta=25°C)(RTr1, RTr2 COMMON)

SYMBOL	PARAMETER	RATING	UNIT
Vcbo	Collector to Base voltage	-50	V
$V_{\mathrm{EBO}}$	Emitter to Base voltage	-6	V
$V_{CEO}$	Collector to Emitter voltage	-50	V
$V_{\mathrm{IN}}$	Input voltage	-12	V
$I_{\mathrm{C}}$	Collector current	-100	mA
ICM	Peak Collector current	-200	mA
PT	Total dissipation	200	mW
Tj	Junction temperature	+150	°C
$T_{\mathrm{stg}}$	Storage temperature	-55~+150	°C



## ${\bf ELECTRICAL\ CHARACTERISTICS} (Ta=25°C) (RTr1,\ RTr2\ COMMON)$

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			TINITO
			MIN	TYP	MAX	UNIT
V(BR)CEO	Collector to Emitter breakdown voltage	I <sub>C</sub> =-100 <i>μ</i> A, R <sub>BE</sub> =∞	-50	_	_	V
ICBO	Collector cut off current	$V_{CB}$ =-50V, $I_{E}$ =0	_	_	-0.1	μΑ
$I_{\mathrm{EBO}}$	Emitter cut off current	$V_{EB}$ =-5V, $I_C$ =0	-307	-410	-594	μΑ
$_{ m hFE}$	DC forward current gain	$V_{CE}$ =-5V, $I_{C}$ =-10mA	33	_	_	_
VCE(sat)	Collector to Emitter saturation voltage	$I_{C}$ =-10mA, $I_{B}$ =-0.5mA	_	-0.1	-0.3	V
$V_{\rm I(ON)}$	Input on voltage	V <sub>CE</sub> =-0.2V, I <sub>C</sub> =-5mA	_	-0.8	-1.4	V
$V_{\rm I(OFF)}$	Input off voltage	V <sub>CE</sub> =-5V, I <sub>C</sub> =-100 μ A	-0.5	-0.7	_	V
$R_1$	Input resistor	_	1.5	2.2	2.9	kΩ
$R_2/R_1$	Resistor ratio	_	3.8	4.7	5.6	_
$ m f_T$	Gain band width product	V <sub>CE</sub> =-6V, I <sub>E</sub> =10mA	_	150	_	MHz

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Ta=-40°C

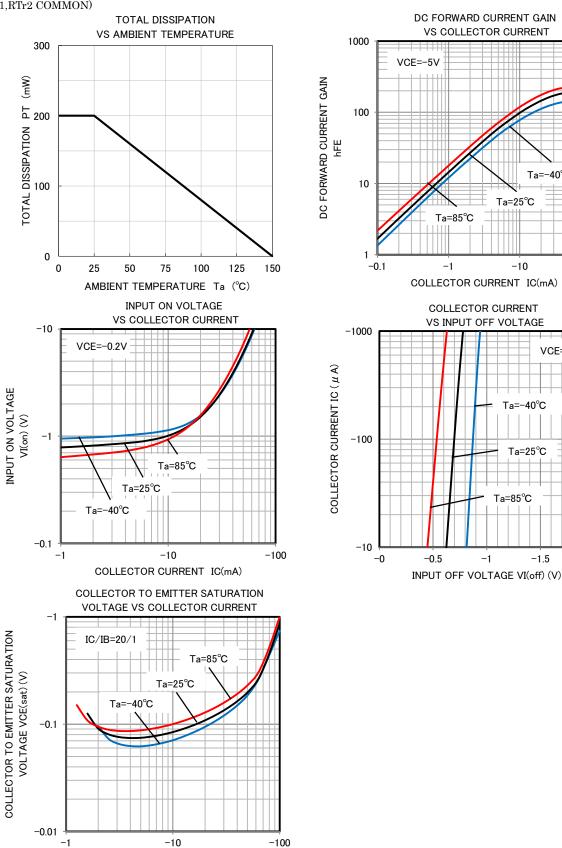
-100

VCE=-5V

-1.5

# TYPICAL CHARACTERISTICS

(RTr1,RTr2 COMMON)



COLLECTOR CURRENT IC(mA)

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