RT3NEEM

Composite Transistor With Resistor For Switching Application Silicon NPN Epitaxial Type

DESCRIPTION

RT3NEEM is a composite transistor built with two RT1N234 chips in SC-88 package.

FEATURE

Silicon NPN epitaxial type.

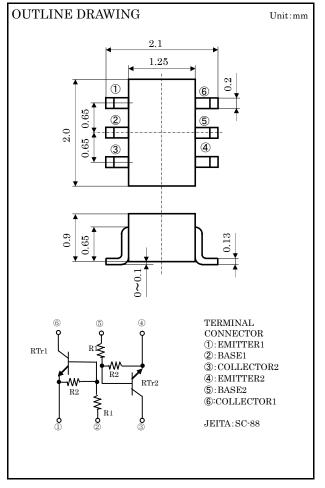
Built in bias resistor.

Each transistor elements are independent.

Mini package for easy mounting

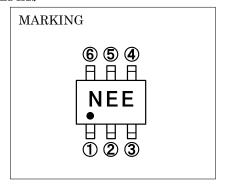
APPLICATION

Inverted circuit, switching circuit, interface circuit, driver circuit



MAXIMUM RATING (Ta=25°C) (The characteristics apply to both Tr1 and Tr2.)

SYMBOL	PARAMETER	RATING	UNIT
Vcbo	Collector to Base voltage	50	V
VEBO	Emitter to Base voltage	6	V
$V_{\rm CEO}$	Collector to Emitter voltage	50	V
VIN	Input voltage	12	V
Ic	Collector current	100	mA
Icm	Peak Collector current	200	mA
Pc	Collector dissipation (Total, Ta=25°C)	150	mW
Tj	Junction temperature	+150	°C
T_{stg}	Storage temperature	-55~+150	°C



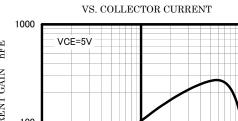
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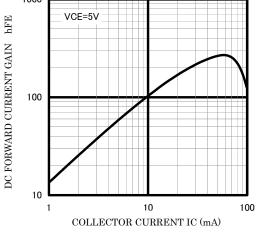
ELECTRICAL CHARACTERISTICS (Ta=25°C) (The characteristics apply to both Tr1 and Tr2.)

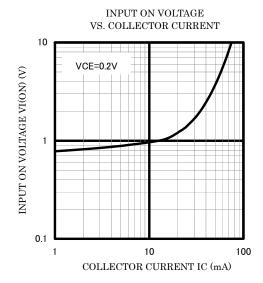
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	Omt
V(BR)CEO	Collector to Emitter break down voltage	I c=100μA, R _{BE} =∞	50			V
Ісво	Collector cut off current	V_{CB} =50V, I $_{E}$ =0			0.1	μΑ
hfe	DC forward current gain	V _{CE} =5V, I C=10mA	50			-
V _{CE} (sat)	Collector to Emitter saturation voltage	I c=10mA, I _B =0.5mA		0.1	0.3	V
VI(ON)	Input on voltage	V _{CE} =0.2V, I _C =5mA		0.8	1.4	V
VI(OFF)	Input off voltage	V_{CE} =5V, I $_{C}$ =100 μA	0.5	0.7		V
R_1	Input resistor		1.5	2.2	2.9	kΩ
R2/R1	Resistor ratio		3.8	4.7	5.6	-
fT	Gain band width product	V_{CE} =6V, I $_{E}$ =-10mA		200		MHz

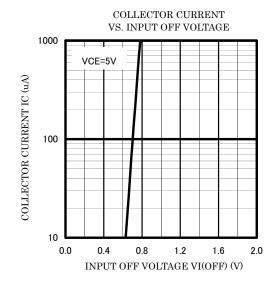
TYPICAL CHARACTERISTICS (Tr1, Tr2)

DC FORWARD CURRENT GAIN











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