# RT2N25M

Composite Transistor With Resistor For Switching Application Silicon NPN Epitaxial Type

### DESCRIPTION

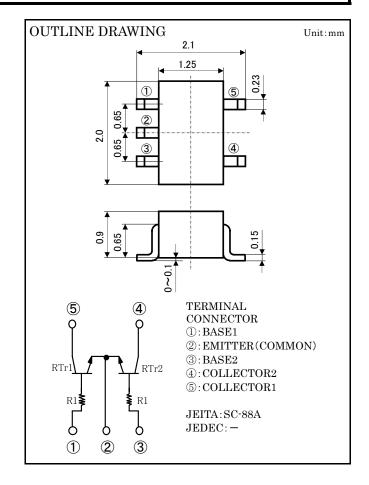
RT2N25M is composite transistor with built-in bias resistor.

## **FEATURE**

Built-in bias resistor (R1=200 $k\Omega$ ) Mini package for easy mounting

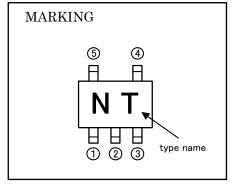
## **APPLICATION**

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
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
Tj	Junction temperature	+150	°C
$T_{\mathrm{stg}}$	Storage temperature	-55~+150	္င



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

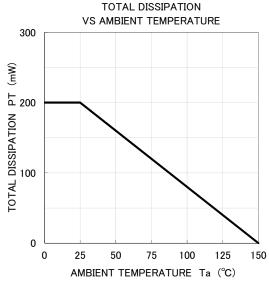
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			TINITE
			MIN	TYP	MAX	UNIT
V(BR)CEO	Collector to Emitter breakdown voltage	$I_C=100 \muA$ , $R_{BE}=\infty$	50	_	ı	V
$I_{CBO}$	Collector cut off current	$V_{CB}$ =50V, $I_{E}$ =0	_	_	0.1	μΑ
IEBO	Emitter cut off current	$V_{EB}$ =5V, $I_C$ =0	_	_	0.1	μΑ
$_{ m hFE}$	DC forward current gain	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA	100	_	_	_
VCE(sat)	Collector to Emitter saturation voltage	$I_{C}$ =0.5mA, $I_{B}$ =0.05mA	_	_	0.3	V
R <sub>1</sub>	Input resistor	_	140	200	260	kΩ
$ m f_{T}$	Gain band width product	V <sub>CE</sub> =6V, I <sub>E</sub> =-10mA	_	200	-	MHz

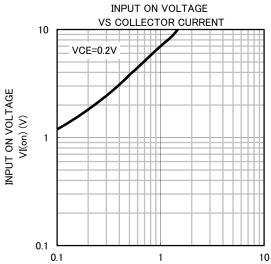
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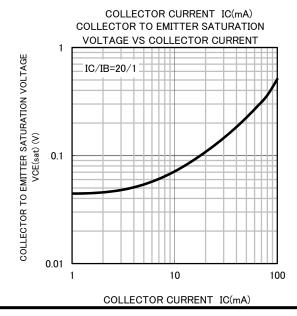
Composite Transistor With Resistor For Switching Application Silicon NPN Epitaxial Type

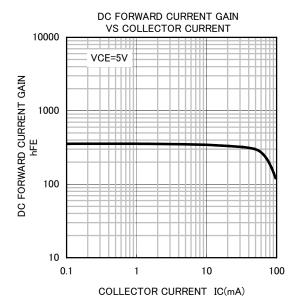
## TYPICAL CHARACTERISTICS

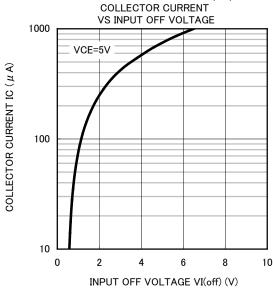
(Ta=25°C)(RTr1,RTr2 COMMON)













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

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