RT2N28M

Composite Transistor With Resistor For Switching Application Silicon NPN Epitaxial Type

DESCRIPTION

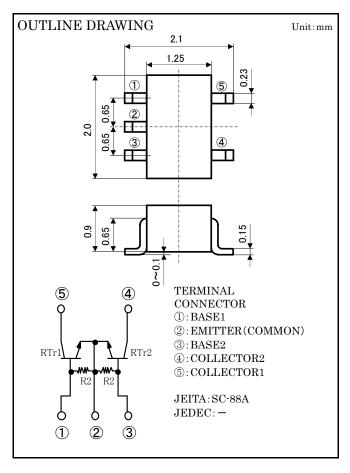
RT2N28M is composite transistor with built-in bias resistor.

FEATURE

Built-in bias resistor (R2=47k Ω) Mini package for easy mounting

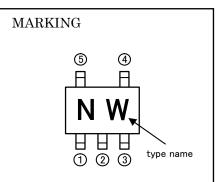
APPLICATION

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	
P_{T}	Total dissipation	200	mW	
Tj	Junction temperature	+150	°C	
$T_{\rm stg}$	Storage temperature	-55~+150	°C	



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

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	UNII
V(BR)CEO	Collector to Emitter breakdown voltage	$I_C=100 \mu$ A, $R_{BE}=\infty$	50	—	—	V
ICBO	Collector cut off current	V_{CB} =50V, I_E =0	—	—	0.1	μA
IEBO	Emitter cut off current	V_{EB} =5V, I _C =0	80	106	154	μA
hfe	DC forward current gain	V _{CE} =5V, I _C =5mA	68	—	—	—
VCE(sat)	Collector to Emitter saturation voltage	Ic=10mA, IB=0.5mA	—	—	0.3	V
R_2	Emitter to Base resistor	-	33	47	61	kΩ
f_{T}	Gain band width product	$V_{CE}=6V$, $I_{E}=-10mA$	_	200	_	MHz

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DC FORWARD CURRENT GAIN

VS COLLECTOR CURRENT

VCE=5V

1

10

0.0

0.1

1

VCE=5V

COLLECTOR CURRENT IC(mA)

COLLECTOR CURRENT

VS INPUT OFF VOLTAGE

1.0

INPUT OFF VOLTAGE VI(off) (V)

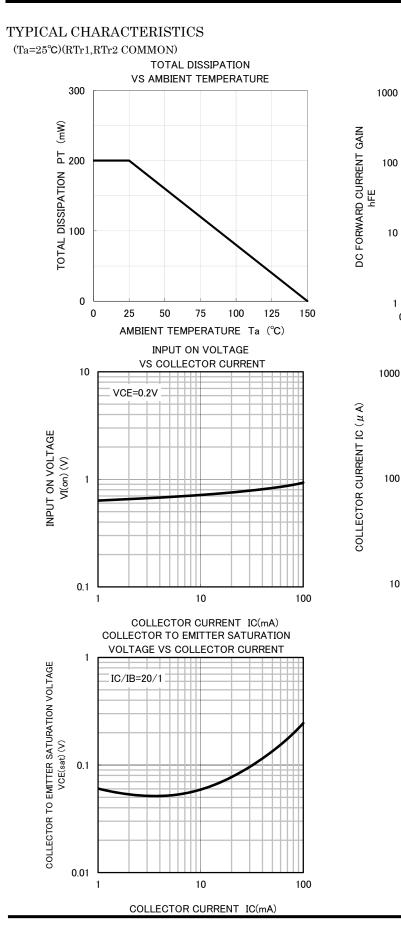
1.5

0.5

10

100

2.0



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