# **RT3TGGM**

Composite Transistor With Resistor For Switching Application Silicon Epitaxial Type

### DESCRIPTION

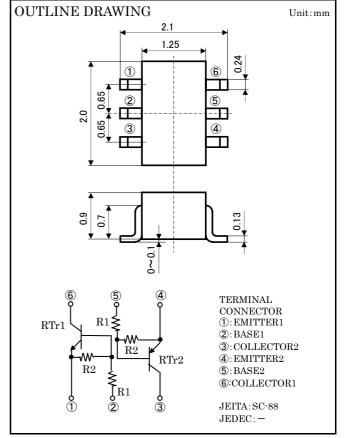
RT3TGGM is composite transistor built with RT1N432 chip and RT1P432 chip in SC-88 package.

### FEATURE

Silicon epitaxial type Each transistor elements are independent. Mini package for easy mounting

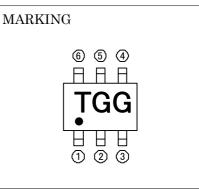
#### APPLICATION

Inverted circuit, Switching circuit, Interface circuit, Driver circuit



## MAXIMUM RATING (Ta=25°C) (RTr1\_NPN, RTr2\_PNP)

SYMBOL	PARAMETER	RATING	UNIT	
VCBO	Collector to Base voltage	50	V	
VEBO	Emitter to Base voltage	7	V	
VCEO	EO Collector to Emitter voltage		V	
VIN	Input voltage	20	V	
IC	Collector current	100	mA	
ICM	Peak Collector current	200	mA	
Pc	Collector dissipation (Total)	150	mW	
Tj	Junction temperature	ure +150		
$T_{stg}$	Storage temperature	-55~+150	°C	



XPNP built in transistor of "-"sign is abbreviation.

### ELECTRICAL CHARACTERISTICS (Ta=25°C) (RTr1\_NPN, RTr2\_PNP)

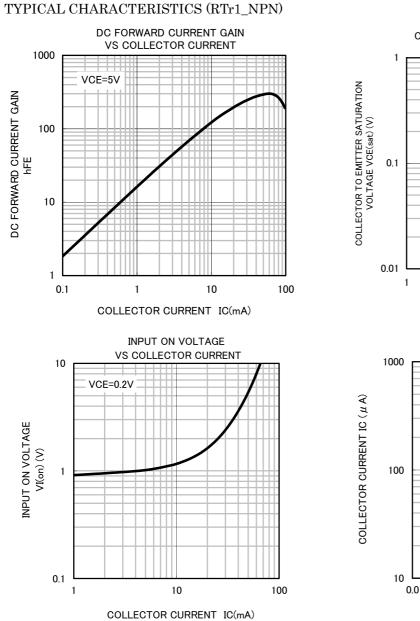
Symbol	Parameter	Test conditions		Limits			TT 14
				Min		Max	Unit
V(BR)CEO	Collector to Emitter break down voltage	I <sub>C</sub> =100µA,R <sub>BE</sub> =∞		50	_	—	V
Ісво	Collector cut off current	V <sub>CB</sub> =50V,I <sub>E</sub> =0		-	-	0.1	μΑ
IEBO	Emitter cut off current	$V_{EB}=5V,I_{C}=0$		255	340	493	μA
hfe	DC forward current gain	VCE=5V,IC=10mA		30		1	—
VCE(sat)	Collector to Emitter saturation voltage	I <sub>C</sub> =10mA,I <sub>B</sub> =0. 5mA			0.1	0.3	V
VI(ON)	nput on voltage VCE=0.2V,IC=5mA			1.0	1.8	V	
VI(OFF)	Input off voltage	VCE=5V,IC=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	—
$\mathbf{f}_{\mathbf{T}}$	Gain band width product	V <sub>CE</sub> =6V,I <sub>E</sub> =10mA	RTr1	_	200		MHz
			RTr2	-	150	_	

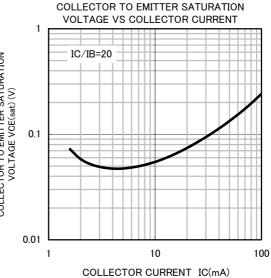
**※**PNP built in transistor of "−"sign is abbreviation.

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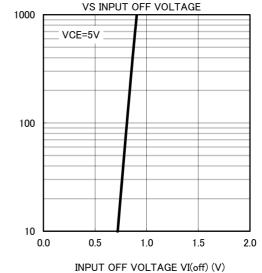
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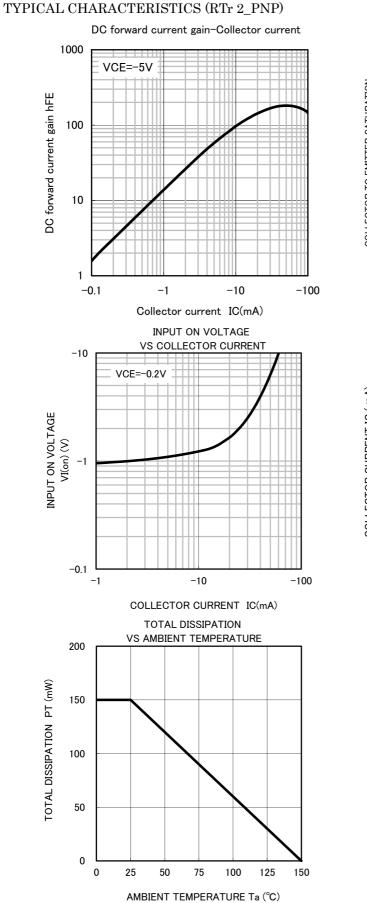
## COLLECTOR CURRENT

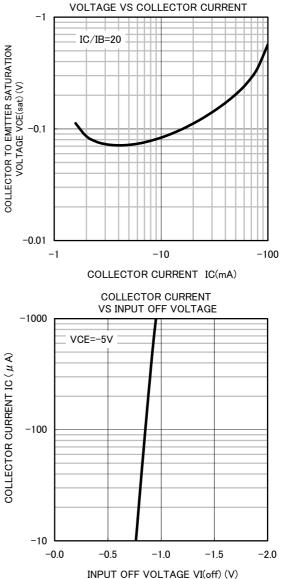


# RT3TGGM

Composite Transistor With Resistor For Switching Application Silicon Epitaxial Type

COLLECTOR TO EMITTER SATURATION





# ISAHAYA ELECTRONICS CORPORATION



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