RT3T55M

Composite Transistor With Resistor For Switching Application Silicon Epitaxial Type

DESCRIPTION

RT3T55M is a composite transistor built with RT1N141 chip and RT1P431 chip in SC-88 package.

FEATURE

Silicon epitaxial type

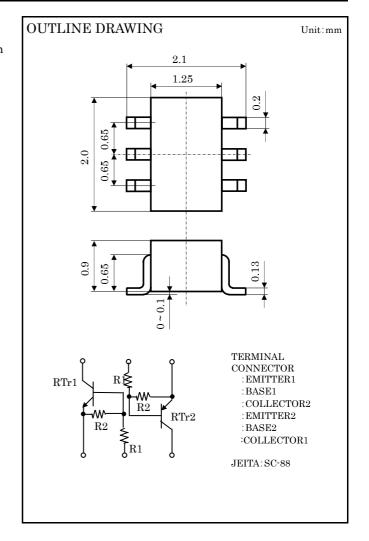
Each transistor elements are independent.

Mini package for easy mounting

APPLICATION

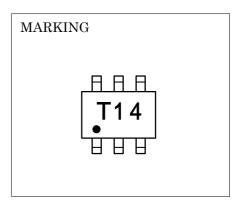
Inverted circuit, switching circuit, interface circuit, driver circuit

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



MAXIMUM RATING (Ta=25)

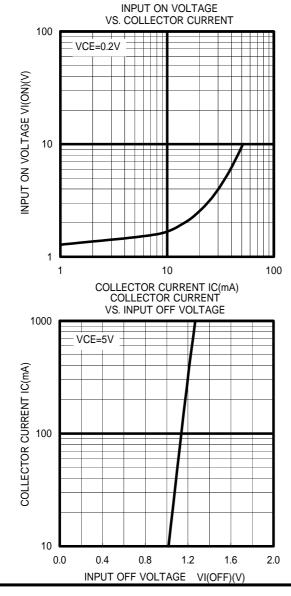
SYMBOL	PARAMETER	RATING		UNI T
Vcbo	Collector to Base voltage	5	V	
VEBO	Emitter to Base voltage	Tr1 10	Tr2 6	V
VCEO	Collector to Emitter voltage	5	V	
Ic	Collector current	10	mA	
Ісм	Peak Collector current	20	mA	
Pc	Collector dissipation (Total, Ta=25)	15	mW	
Tj	Junction temperature	+ 1		
$T_{ m stg}$	Storage temperature	-55 ~		

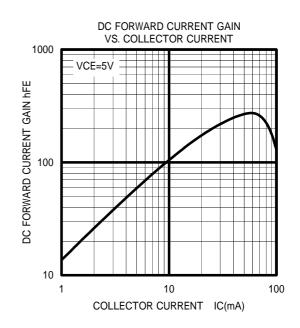


ELECTRICAL CHARACTERISTICS (Ta=25)

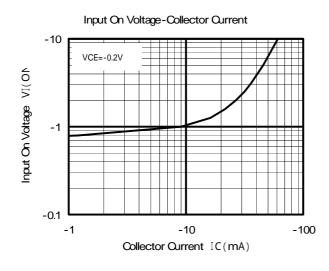
Symbol	Parameter	Test conditions		Limits			Unit	
Symbol	rarameter	lest conditions			Min	Typ	Max	Oilit
V(BR)CEO	Collector to Emitter break down voltage	I _C =100μA,R _{BE} =∞			50	-	-	V
ICBO	Collector cut off current	V _{CB} =50V,I _E =0			-	-	0.1	μA
hfe	DC forward current gain	Tr1 Tr2	·		50	-	-	-
VCE(sat)	Collector to Emitter saturation voltage	IC=10mA,IB=0.5mA			-	0.1	0.3	V
V _{I(ON)}	Input on voltage	$V_{\rm CE}$ =0.2 V , I $_{\rm C}$ =5 mA		Tr1 Tr2		1.5 0.9	3.0 1.7	V
17 -(Input off voltage	$V_{\text{CE}}\!\!=\!\!5V$, I $_{\text{C}}\!\!=\!100\mu\text{A}$	Tr1	0.8	1.1	1.7	V	
V _{I(OFF)}	Input off voltage		Tr2	Tr2	0.5	0.7		V
R_1	Input resistor	- Tr1 Tr2		Tr1	7	10	13	kΩ
It]				Tr2	3.3	4.7	6.1	Kuz
R ₂ /R ₁	Resistor ratio	$-\frac{\operatorname{Tr}1}{\operatorname{Tr}2}$		Tr1	0.9	1.0	1.1	_
				Tr2	4.2	4.7	5.1	
fT	Gain band width product	VCE=6V,IE=-10mA		Tr1 Tr2	-	200 150	-	MHz

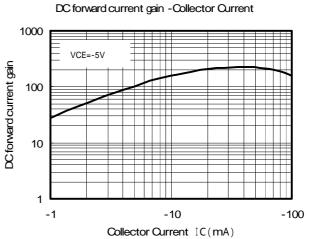
${\bf TYPICAL\ CHARACTERISTICS\ (Tr1)}$

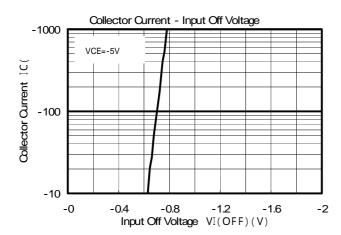




TYPICAL CHARACTERISTICS (Tr2)









Marketing division, Marketing planning department 6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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