Notice: This is not a final specification Some parametric are subject to change.

RT3C66M

Dual Transistor For Differential Amplify Application Silicon Npn Epitaxial Type

DESCRIPTION

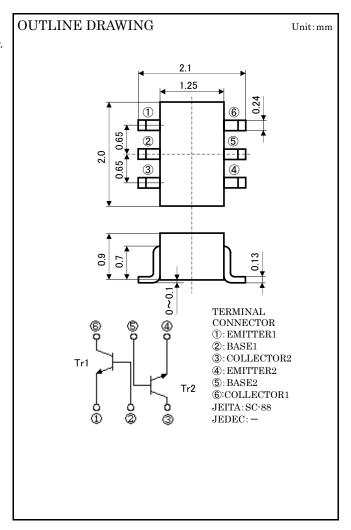
RT3C66M is a sillicon NPN epitaxial type dual transistor. It is designed for differential amplify application.

FEATURE

- ●High Vceo Vceo=160V
- ●Good two elements characteristics $h_{FE1}/h_{FE2}=1.0$ typ $|V_{BE1}V_{BE2}|=2mV$ typ

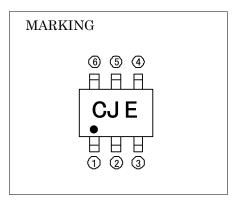
APPLICATION

For differential amplify application.



MAXIMUM RATING (Ta=25°C) (Tr1, Tr2.)

SYMBOL	PARAMETER RATING		UNIT	
V _{CBO}	Collector to Base voltage	180	V	
V _{EBO}	Emitter to Base voltage	6	V	
V _{CEO}	Collector to Emitter voltage	160	٧	
I _{CM}	Peak collector current	200	mA	
I _C	Collector current	100	mA	
P _T	Total allowance dissipation(Ta=25°C)	200	mW	
T _j	Junction temperature	+150	°C	
T_{stg}	Storage temperature	-55 ~ + 150	°C	



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ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1, Tr2.)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	Unit
V _{(BR)CBO}	C to B break down voltage	$_{\rm C}$ =100 μ A, $_{\rm E}$ =0A	180	-	-	٧
V _{(BR)EBO}	E to B break down voltage	$I_{\rm E}$ =10 μ A, $I_{\rm C}$ =0A	6	-	-	٧
$V_{(BR)CEO}$	C to E break down voltage	I _c =1mA, R _{BE} =∞	160	-	-	٧
I _{CBO}	Collector cut off current	V _{CB} =120V, I _E =0A	-	-	100	nA
I _{EBO}	Emitter cut off current	V _{EB} =4V, I _C =0A	-	-	100	nA
hFE1	DC forward current gain1	VCE=5V, I _c =1mA	72	-	-	-
hFE2	DC forward current gain2	VCE=5V, I _c =10mA	72	-	330	
hFE3	DC forward current gain3	VCE=5V, I _c =50mA	27	-	-	
VCE(sat)1	C to E saturation voltage1	I _c =10mA, I _B =1mA	_	_	0.15	٧
VCE(sat)2	C to E saturation voltage2	I _c =50mA, I _B =5mA	_	-	0.2	٧
VBE(sat)1	B to E saturation voltage1	I _c =10mA, I _B =1mA	_	-	1.0	٧
VBE(sat)2	B to E saturation voltage2	I _c =50mA, I _B =5mA	-	-	1.0	٧
VBE1-VBE2 (%VBE1:Tr1,VBE2:Tr2)	B-E voltage differential	VCE=5V, I _c =1mA	-	2	10	mV
hFE1/hFE2 (%hFE1:Tr1,hFE2:Tr2)	DC forward current gain raito	VCE=5V, I _c =1mA	0.9	1.0	1.1	-
fT	Gain bandwidth product	VCE=10V, I _E =-10mA	100	-	300	MHz
Cob	Collector output capacitance	VCB=10V, I _e =0A, f=1MHz	-	1.7	6	pF
Cib	Emitter input capacitance	VEB=0.5V, I c=0A, f=1MHz	-	-	20	pF

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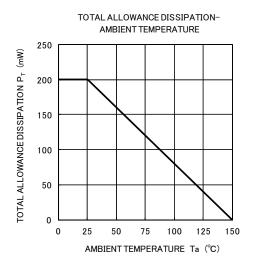
RT3C66M

100

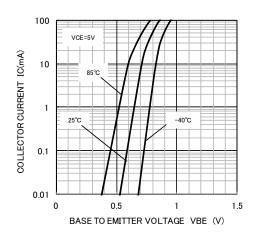
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Dual Transistor
For Differential Amplify Application
Silicon Npn Epitaxial Type

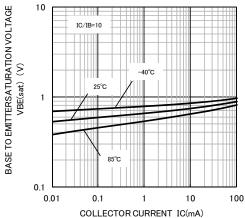
TYPICAL CHARACTERISTICS (Tr1,Tr2.)



COMMON EMITTER TRANSFER



BASE TO EMITTERSATURATION VOLTAGE VS. COLLECTOR CURRENT



COLLECTOR CURRENT 1000 VCE=5V 85°C -40°C

10

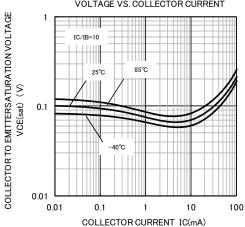
0.01

0.1

DC FORWARD CURRENT GAIN VS.

COLLECTOR TO EMITTERSATURATION VOLTAGE VS. COLLECTOR CURRENT

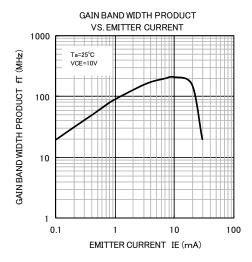
COLLECTOR CURRENT IC(mA)

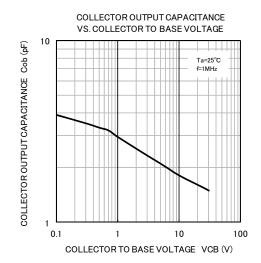


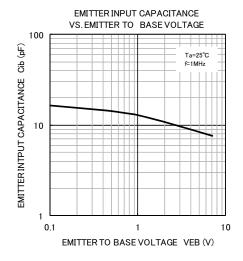
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Dual Transistor For Differential Amplify Application Silicon Npn Epitaxial Type









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